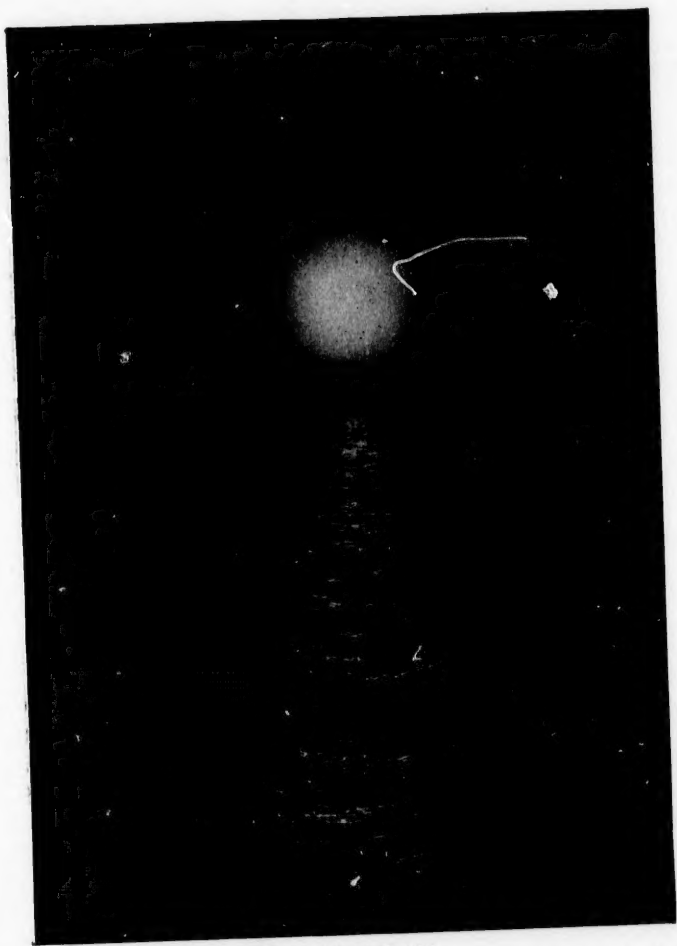




THE MIDNIGHT SUN.

Frontispiece.

IN ARCTIC SEAS.

A NARRATIVE OF

THE VOYAGE OF THE KITE

WITH THE

PEARY EXPEDITION TO NORTH GREENLAND.

BY

ROBERT N. KEELY, JR., M. D.,

SURGEON TO THE EXPEDITION SENT BY THE ACADEMY OF NATURAL SCIENCES TO
ACCOMPANY LIEUTENANT PEARY: MEMBER OF THE GEOGRAPH-
ICAL CLUB OF PHILADELPHIA, ETC.,

AND

G. G. DAVIS, A. M., M. D., M. R. C. S.,

MEMBER OF THE ARCHEOLOGICAL ASSOCIATION OF THE UNIVERSITY OF
PENNSYLVANIA, ETC.

WITH MAP AND ILLUSTRATIONS.

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1892.

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PREFACE.

THE authors have requested me to write a preface to their story of the *Kile's* voyage to the far North. I have gladly consented, because I not only have a full knowledge of the voyage itself, but also of the book, the authors of which have been my intimate friends for many years. The book needs no apology. At a time when the whole country is interested in the efforts to rescue the little band of daring explorers who have risked their lives in the cause of science, everything that relates to their journey possesses value, particularly when it is told by one familiar with the members and with the circumstances surrounding their journey to the North. The sentimental interest relating to their fate is scarcely less than was felt concerning that of Sir John Franklin. In the one case it was the sympathy for a devoted wife which caused expedition after expedition to be sent out in search of her courageous husband. In this case another devoted wife refused to leave her husband's side, but has faced the terrors of an Arctic winter with him, and it is to rescue and relieve her that the sympathy of the people has been awakened. The relief expedition has the prayers of a nation that its quest may be successful.

But the present book has an interest quite its own in that it relates, in a straightforward way, exactly what was seen and heard by Dr. Keely on his voyage to the North, and which was recorded with fidelity in a diary which he kept from day to day. The expedition, of which Dr. Keely and myself had the honor to be members, had exceptional opportunities to see the life and costumes of the natives of Northern Greenland. Most of the expeditions to the Arctic regions have been in haste to reach the farthest possible north, and on their return were interested only in reaching civilization. The *Kite*, however, steamed leisurely back, stopping wherever points of interest existed, thus allowing the members of the party to become fairly familiar with the natives and the desolate country which they inhabit. Those things which were of special interest were faithfully recorded in Dr. Keely's diary, which proved the basis of the present work.

Although this was his first voyage to the Arctic regions, Dr. Keely was already experienced in travel and with meeting strange people. He had visited not only most of the countries of Europe, but also many of the States of Central and South America, and his powers of observation, thus quickened, grasped many interesting things which would have escaped one less familiar with the world and its people.

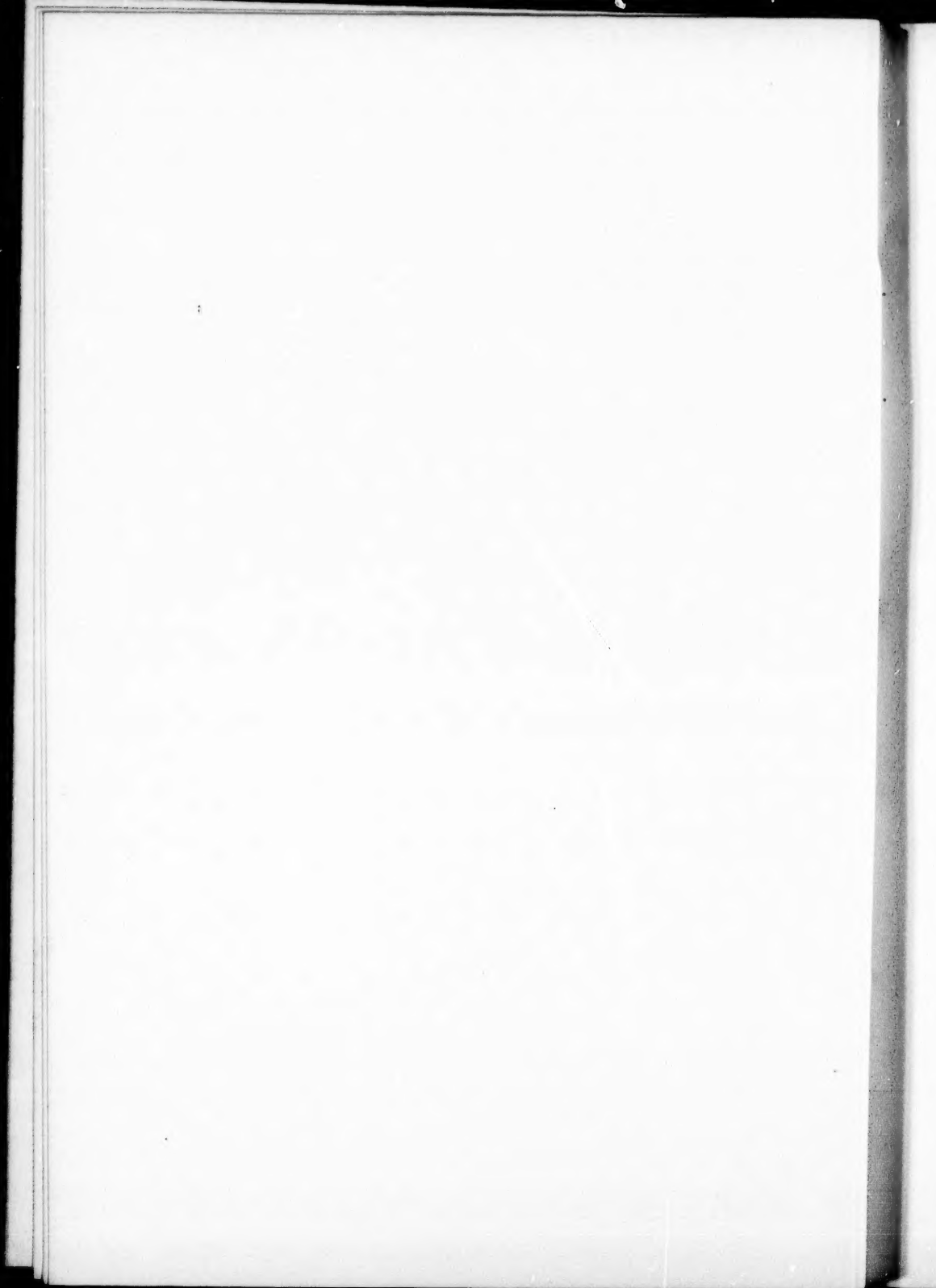
The aid which he received from Dr. Gwilym George Davis was invaluable. Not only with his pencil (for the sketches which illustrate the work were made by him), but also with his pen, he has devoted himself, with untiring industry, to the task of making readable and valu-

able this book of Arctic travel. My own share in the work has been confined to the writing out of certain facts and incidents of which I had special knowledge. I feel that I have little claim to either credit or thanks, but am proud of an opportunity to have my name connected with a work which, I am sure, will be a source of pride to the authors and of usefulness to the general public.

Dr. Keely and Dr. Davis have asked me to thank particularly Prof. Benj. Sharp for the use of the photographs from which most of the plates have been made; also Prof. Jacob F. Holt and Prof. Angelo Heilprin, for the same courtesy; and Jno. J. McKenna, Esq., of Philadelphia, for several acts of kindness.

June, 1892.

W. H. BURK.



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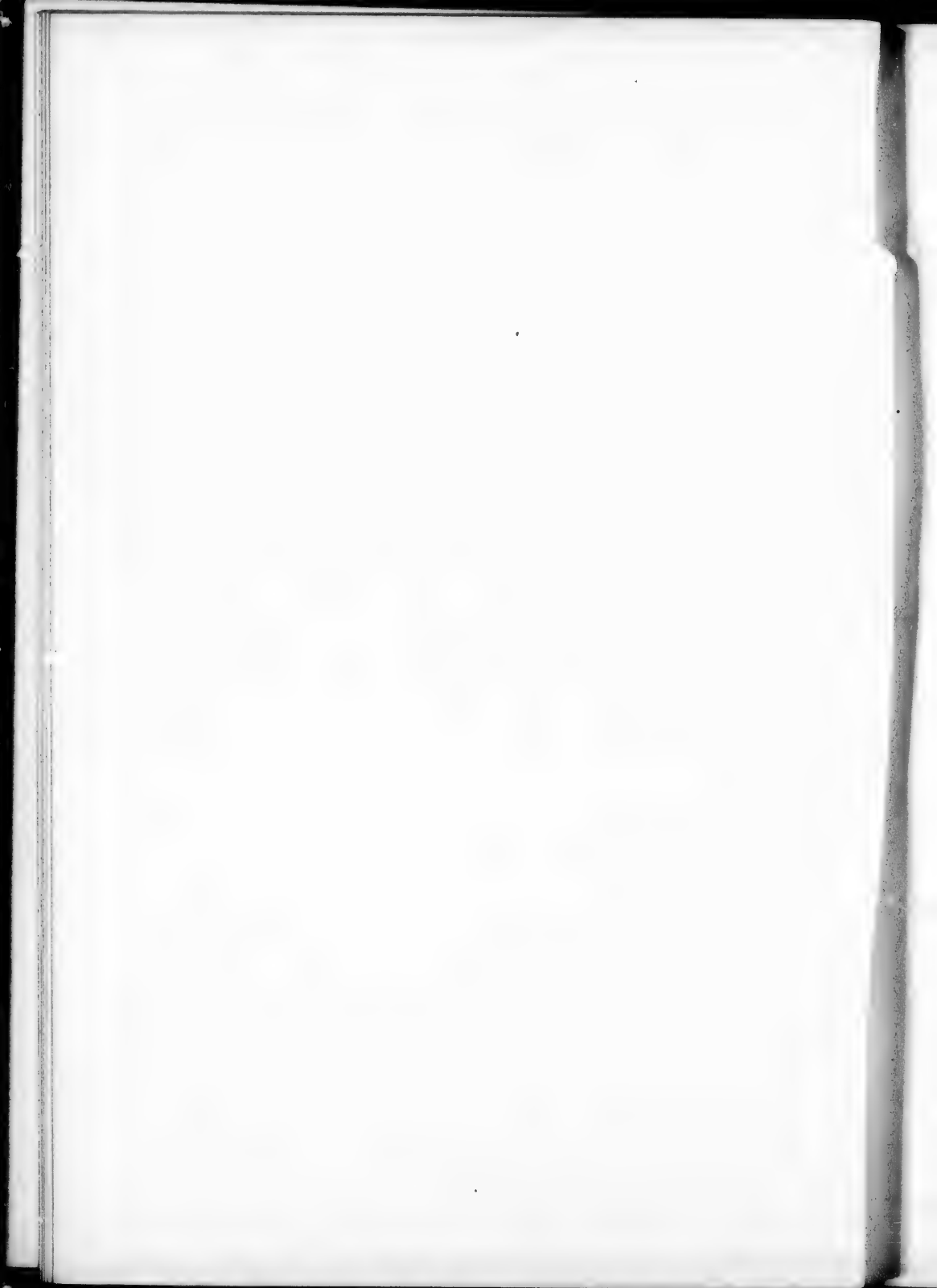
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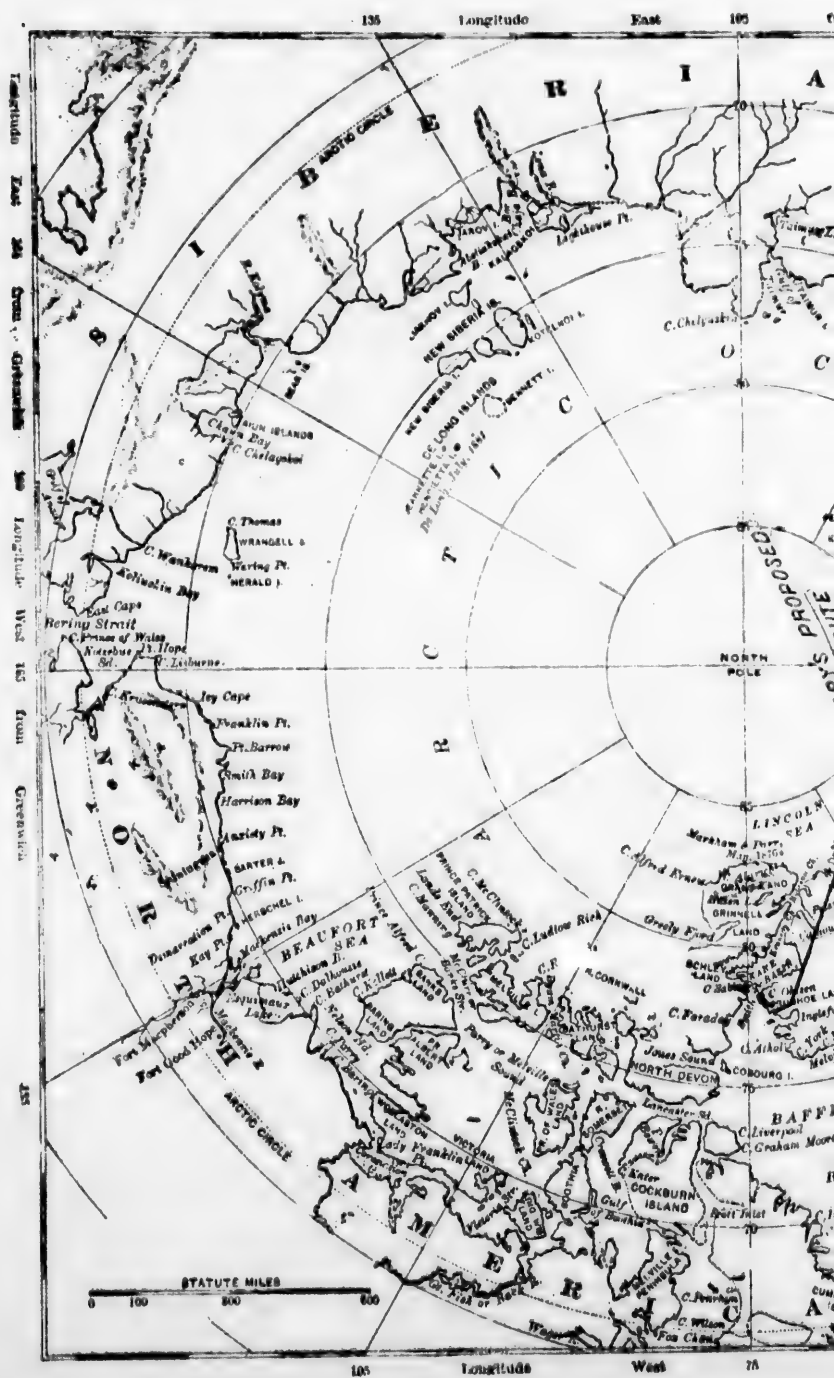
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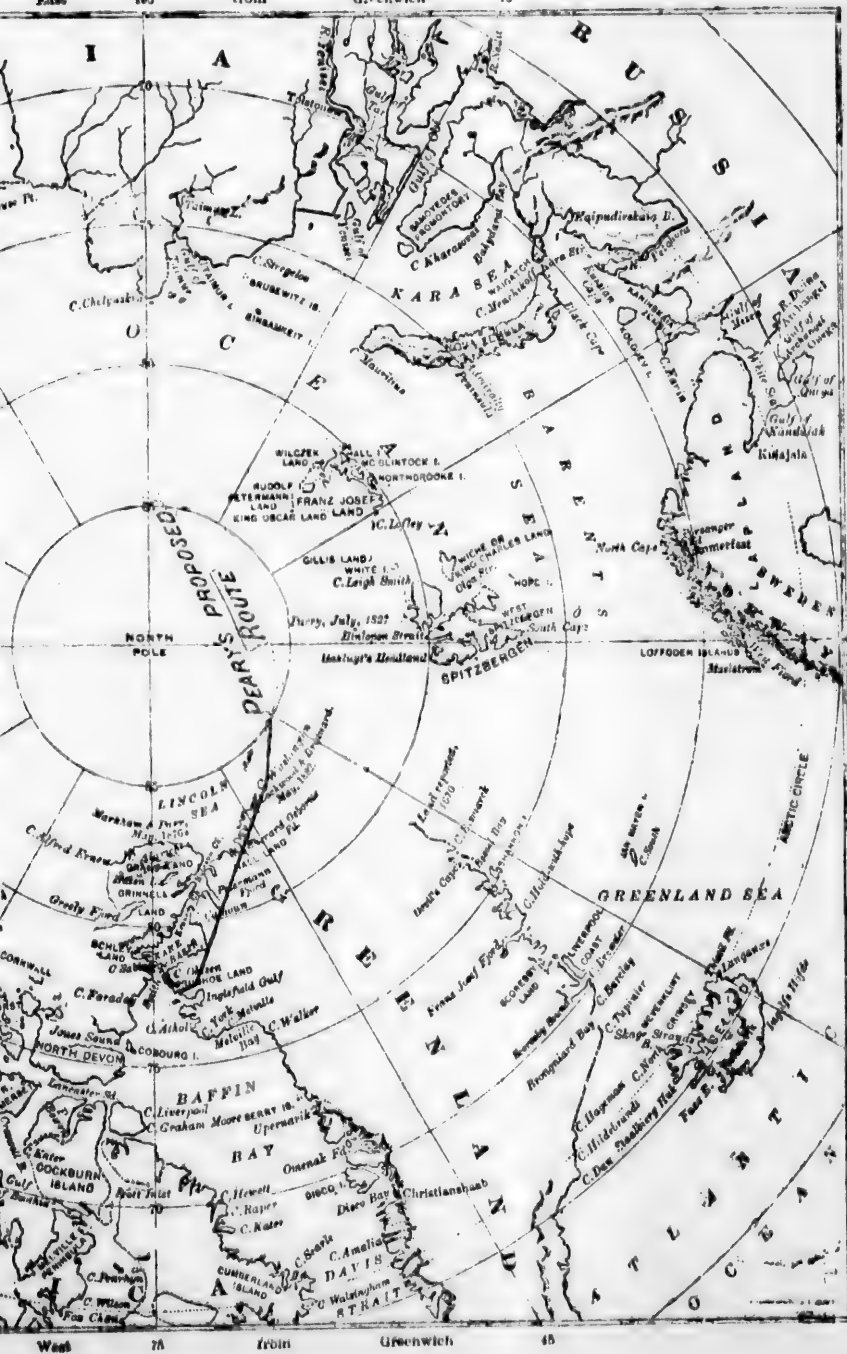
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INTRODUCTION.

IN 1886, Lieutenant Robert E. Peary, of the Engineering Department of the United States Navy, having secured leave of absence, took passage on the steamer *Falcon* from St. John's, Newfoundland, to Disko, in Greenland. The *Falcon* was bound on a whaling trip to Lancaster Sound, at the head of Baffin Bay, but her captain agreed to put the lieutenant ashore at Disko and call for him on his return voyage in the fall. Lieutenant Peary desired to examine the unknown interior of Greenland, and took this means of reaching his destination. In due time he landed and made preparations for his journey. With only a single companion—a Danish officer who, when the Eskimos refused, had volunteered to accompany him—the lieutenant scaled the steep cliffs which everywhere separate the known from the unknown land in Greenland, and set his foot on the mysterious ice cap.

All Greenland, as far as it has been explored, with the exception of a strip bordering the coast, is one vast glacier. What are called glaciers on its shores are merely tongues of ice pushed out into the ocean by the great weight of a continent of ice behind it. From the extreme north to Cape Farewell is one vast sheet, the

product of centuries of snow-storms. This ice sheet is comparatively level, the inequalities of the mountains and valleys being almost entirely obliterated by the uniform coating of ice. Only the gradual rise of the land, from the level of the sea to an altitude of about six thousand feet in the interior, is preserved. Here and there, in the interior, mountain-peaks push their way through the enormous blanket of snow and ice, but except for these landmarks the surface is an almost level plain. Across this surface Lieutenant Peary made his way due east for about one hundred miles. The journey, though made under great difficulties, was without danger or extraordinary fatigue, and served to confirm him in his belief of the correctness of a theory which he had formed. This theory, in brief, was that the true way to solve the many problems which Greenland offers to geographers, and at the same time to reach the most northern point attainable by man, was to journey overland on its frozen surface, instead of attempting to work one's way northward along the shores.

It was several years after this first exploration that an opportunity offered to definitely prove his theory. In the mean time Nansen had succeeded in crossing the continent from east to west, although at a point below the Arctic Circle. The report of the condition of the interior by this explorer agreed with what was found by Peary. A comparatively smooth ice cap covered the entire breadth of Greenland, at least at that point, and there was every reason to suppose that the same condition prevailed still farther north.

It is not necessary to detail the modifications which were made of the original plan projected by Lieutenant Peary. His aim was to attain the most northern point yet reached by man. This was $83^{\circ} 24'$ north latitude, and was made by Lockwood and Brainard in 1882.

To do so he required several things: First, he needed to be landed at a point as far north as possible, from which an expedition could start; then he must winter in this locality, so as to take advantage of the earliest possible opportunity to start on his northward journey: he had so to arrange matters as to make such "caches" of food and provisions in the fall of the year as would obviate the necessity of carrying with him all the supplies that might be necessary for the journey; finally, he must provide some means of retreat to a civilized settlement, whence he could carry back his party, together with any records of discoveries that he might make.

To the expedition he was willing to contribute his private fortune, but more would be required. In order to prosecute his researches he needed, besides, the public support of some distinguished institution and leave of absence from the government.

Government aid was out of the question. The sad result of the Greely expedition had been too recently announced to warrant any hope of help from that quarter. The lieutenant, after several rebuffs, lectured before the American Geographical Society of New York and the Academy of Natural Sciences of Philadelphia. He enlisted the sympathy of and received such substantial support from these bodies that the expedition was finally

sent under the auspices of the last-named institution. The desired leave of absence was obtained, and friends of the lieutenant and the Academy provided the funds.

It would be difficult, if not altogether unnecessary, to explain how the original plan of Lieutenant Peary to reach his desired point and there deposit the supplies he would need was modified. Eventually it was determined to send out an exploring expedition by the Academy of Natural Sciences. This expedition was to charter a ship, carry Lieutenant Peary, his party, and such material as he deemed necessary, and land them on or about the shores of Whale Sound or Inglefield Gulf, in latitude 78° north, and there leave them. On the return voyage the Academy party, according as time and opportunity permitted, proposed to make investigations of the land and its natural history, and bring back such specimens and information as might be of value to the Academy. The supplies for the proposed inland journey and the means of returning to civilization were to be provided by the Lieutenant himself. These included a supply of provisions sufficient to last his party, after the landing had been made, for at least eighteen months, exclusive of the fresh meats which he might obtain on the voyage or at his camp. A portion of the ship's supply of coal was also left with him, and, besides this, building material sufficient to construct a small house was carried, together with two large whale-boats, fitted for dragging over the ice, rowing, and sailing, in which the retreat of the party was to be attempted in the summer of 1892. He had also a full supply of scientific instruments, snow-

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MRS. JOSEPHINE DIEBITSCH PEARY.



LIEUT. ROBERT E. PEARY, U. S. N.

shoes, implements for hunting, etc., and warm clothing. He had hoped to supplement his supplies by the obtaining of Eskimo guides, dogs, and sledges at Godhavn. In this he was disappointed, as were also his expectations, to some extent, in the supply of fresh meat. Otherwise all that he desired was taken to McCormick Bay and left on its shores.

The leader of what is generally known as the Peary Expedition adopted the title of the North Greenland Expedition of 1891-92. The Academy party, therefore, distinguished itself as the West Greenland Expedition of 1891. Both expeditions were under the command of Lieutenant Peary until he left the vessel. Later, the West Greenland Expedition was in charge of Professor Angelo Heilprin. The personnel was as follows:

NORTH GREENLAND EXPEDITION OF 1891-92.

Lieutenant R. E. Peary, the commander of the North Greenland Expedition, is a native of Pennsylvania, but has long been a resident of the State of Maine. He is about forty years of age, and spare built but hardy. He occupies in the government service the position of civil engineer, being attached to the Navy Department with the rank of lieutenant.

His wife, Mrs. Josephine Diebitsch Peary, was a resident of Washington, D. C., and is a member of a well-known family of that city. She accompanied her husband on his perilous journey, and has remained over winter at the northern headquarters. She is probably the first white woman to winter in such a high latitude.

Langdon Gibson, of Flushing, Long Island, is about twenty-four years of age, being tall and muscular, and acted generally as Lieutenant Peary's chief assistant.

Eivard Astrup is a Norwegian, and had only lived in the United States for a few months when he volunteered for the expedition. He is skilled in the use of the "ski," as the peculiar snow-shoes of Norway are called.

John T. Verhoeff is a native of Louisville, Kentucky, and acts as the mineralogist of the party.

Dr. F. A. Cook is the surgeon of the party, and a graduate of the College of Physicians and Surgeons of New York.

Matthew Hensen, who acted as Lieutenant Peary's servant on the latter's trip across Nicaragua, accompanied him to the North. He is an active, intelligent young colored man, and was formerly a resident of Philadelphia.

WEST GREENLAND EXPEDITION.

Prof. Angelo Heilprin, the leader of the West Greenland Expedition, was the executive curator of the Academy of Natural Sciences. A native of Austro-Hungary, but long a resident of Philadelphia, his reputation as a geologist is world-wide. He is the author of numerous works which are accepted as standards on the subjects of geology and general natural history.

Professor Benjamin Sharp accompanied the expedition as zoologist in charge; he is the corresponding secretary of the Academy, a graduate of the University of Pennsylvania and of Wurzburg, and had made a special

study of invertebrate zoology at the Naples Zoological Station.

Professor J. F. Holt is the Professor of Natural History and Hygiene at the Central High School of Philadelphia. He accompanied the expedition as its zoologist.

Dr. William E. Hughes was the ornithologist. He was likewise a graduate of the University of Pennsylvania, and a well-known practitioner of medicine of Philadelphia.

Mr. Levi W. Mengel, the entomologist, is a resident of Reading, Pennsylvania, and is well known as a collector of lepidoptera.

Dr. William H. Burk, the botanist, was a graduate of the University of Pennsylvania, and is one of the associate editors of the Philadelphia *Public Ledger*.

Mr. Alexander C. Kenealy, a son of the celebrated member of Parliament, was detailed by the *New York Herald* to accompany the expedition as its correspondent.

Mr. Frazer Ashhurst is a member of a well-known Philadelphia family, and accompanied the expedition through a love of adventure and travel.

Dr. Robert N. Keely, Jr., the surgeon to the expedition, was a graduate of the Jefferson Medical College of Philadelphia, and had had an extensive experience in the hospitals of Paris.

The members of the expedition were comparatively young men, but all accustomed to travel. They formed a most congenial company, and lasting friendships were formed on the long voyage.

The expedition left Brooklyn, N. Y., on June 6th, on the Arctic whaling steamer *Kite*, which had been chartered for the purpose from Bowring Bros. of St. John's, Newfoundland, by the Academy of Natural Sciences, with a crew of fifteen men, including the captain. She returned to St. John's on August 23d. The Peary party had been landed at McCormick Bay, in latitude $77^{\circ} 43'$ north, and the members of the West Greenland Expedition returned to Philadelphia by way of Baltimore.

During the voyage the expedition had rather exceptional facilities for examining the habits and customs of the natives, especially those in the vicinity of Cape York. They belong to a most interesting race, and the facts discovered concerning them well repaid the attention thus devoted. Large numbers of curiosities, weapons, domestic utensils, and toys were brought back from these distant regions. The description in the following pages is, therefore, not merely a narrative of a voyage, but includes also some account of the natives and their customs.

IN ARCTIC SEAS.

CHAPTER I.

THE START.—CAPTAIN PIKE.—OUR CREW.—THE LAND OF EVANGELINE.—ARRIVAL AT SYDNEY.—COALING FOR THE VOYAGE.

WE were off for the Arctic regions, and looked our last on New York harbor while the crowd that always assembles on a wharf on such occasions gave hearty cheers, and countless steam-whistles added their noisy farewells. The ship that was to carry us thither was the *Kite*, an Arctic steam-whaler and sealer of two hundred and eighty tons, which, though small, was admirably fitted and designed for the purpose. She was technically known as a barkentine; that is to say, carried square sails on her foremast, while the main- and mizzen-masts were "rigged fore and aft" in schooner fashion. She was a staunch little vessel, and we soon learned to admire her seaworthiness as well as her strength. The assistant engineer, Mr. McKinley, showed us, soon after the start was made, how her bow, for six or eight feet back from the prow, was a mass of oak; how her timbers, enormous for the size of the vessel, were bolted and keyed together; how the en-

gines, though small and compact, were fully competent for the service they were to perform; told us how the propeller was of bell-metal, being deeply sunken to avoid danger from floating ice; and explained other points about her that we appreciated much more fully when the attack on the ice began.



CAPTAIN RICHARD PIKE.

Of all the ship's company, I particularly admired Captain Richard Pike. He was the most experienced ice-sailor on board. Besides having made many voy-

ages as a whaler and sealer, he had the honor to be master of the *Proteus* when it carried the unfortunate Greely expedition to its winter home at Fort Conger, in 1881, and had also carried up the expedition of Lieutenant Garlington, which attempted to relieve Greely in 1883, in the same vessel.

On that journey the *Proteus* was crushed in the ice near Cape Sabine, July 23, 1883. The voyagers never tired of having the old captain tell of this terrible adventure, nor of his really wonderful retreat to Upernavik, travelling six hundred miles, in open whale-boats, across a sea filled with icebergs and floe ice. It was often necessary, he said, to unload the boats and drag them over long stretches of rough ice for miles to reach another lead, then transport their provisions, and launch the boats again in the tortuous passages of the Melville Bay pack. This, of course, was a severe task, and too often when completed would be found of little advantage to their progress. He said that he never lost heart but once. This was after a day of severe labor, when the boats had been drawn up on an iceberg and they prepared to "camp," if camping it could be called, for a hard storm of sleet and hail was raging, and it was impossible to build any fire. As they were about to lie down to sleep on the ice there were unmistakable signs of the collapse of the iceberg. The work was all to do over again. They must load and launch the boat, and pull off in the stormy sea for a safer resting-place. This they found at last on an ice-floe, and the men, worn out by their labor, threw themselves down with scarcely any preparation and went

fast asleep at once. He himself, he added, was "too tired to sleep," and in utter misery and despair sat up, thinking of home and family, until they awoke.

On reaching Upernavik they were well treated by the Danes, and in a few weeks were homeward bound on the United States S. S. *Yantic*, which was to have accompanied the *Proteus*, but had been unable to force its way through Melville Bay.

Captain Pike was a typical Newfoundlander, and though nearly sixty years of age was as active in mind and body as many men of half his years. His face beamed with geniality and good nature, and though his whitened hair and rugged face showed marks of the hardships he had experienced as a whaler and sealer, it was yet frank, open, and intelligent, as a good old sea-captain's face ought to be. All of us reposed the utmost confidence in him, his directions and advice being strictly obeyed and followed without question by everyone, including Lieutenant Peary himself. He was a good navigator, and did his best to impart some of his knowledge to "his boys," as he affectionately called the younger members of the expedition.

It was, however, for his friendliness and patience that we admired him most. Always genial and even-tempered, whether the ship was jammed in the ice in Melville Bay or tied up to the wharf at Sydney or St. John's, whether the sea was smooth or rough, his manner toward us never changed. On deck he was the experienced Arctic seaman, ever watchful for danger, yet ever scorning peril; between decks he was a hearty, whole-souled

companion, older in years but younger in spirit than any one of us.

Edward Tracy, the chief mate, was an excellent navigator, with large experience in travel in icy seas. He was exceedingly watchful and attentive to his duties, but nevertheless found time to instruct and entertain us. Patrick Dumphy, who acted as second mate, was a sturdy ice-pilot, and steered the ship through the narrow and tortuous passages in the ice-pack with great skill and discretion.

We had two engineers, William Jardine and his assistant, Alexander McKinley. Mr. Jardine was a man of superior knowledge and large experience. At first he was somewhat reserved, but after he had become thoroughly acquainted with us showed his companionability as well as the force of his intellect. He was an excellent mechanic, as was also his assistant, Mr. McKinley, who likewise was whole-souled and genial. Their ability and skill are shown by the fact that, although the engines of the *Kite* were many years old, and repeatedly subjected, in the course of the voyage, to the most severe strains at brief intervals, from full speed ahead to full speed astern, the entire run of more than six thousand miles was made with only a single stoppage for repairs, and this only delayed us about an hour. It was to their watchful care alone that this most satisfactory result was due.

A full list of the crew was as follows: Captain, Richard Pike; chief mate, Edward Tracy; second mate, Patrick Dumphy; chief engineer, William Jardine; second

engineer, Alexander McKinley; steward, Lawrence Hackett; assistant steward, Patrick Welsh; cook, Thomas Pfeffer; seamen, Timothy Tooney, Thomas Collins, John Cumming, John Verge; firemen, Andrew Roost, Edward Crook, John Cunningham.

The voyage from Brooklyn to North Sydney was uneventful. Once in a while some one would remind us that the land we saw was historic or romantic, but we were far off shore, and even the reminder of the fact that we were passing the home of Evangeline, where,

" In the Acadian land, on the shore of the basin of Minas,
Distant, secluded, still, the little village of Grand Pré
Lay in a fruitful valley,"

failed to arouse enthusiasm.

We were compelled to enter either St. John's, Newfoundland, or Sydney, on Cape Breton, to obtain a supply of coal. The latter port was selected, for several reasons. There is a small amount on the northern side of Disko Island, Greenland, but it is of poor quality and shaley, and there are no proper means of obtaining it. It was of course preferable to coal at as far northern a point as possible. This we appreciated more fully when the hold and even the between-decks of the *Kite* were filled with what was by no means an extravagant supply.

As the harbor of Sydney was entered we had our first chance to examine closely the shores of a strange country. At first flat and dull, the scenery became more and more

picturesque as we sailed up the harbor. Both shores are high, and the belts of stratified rocks are clear and distinct. Sandstone, limestone, and coal alternate in long, nearly horizontal layers on the opposite sides, and the green summits are further embellished by pretty little churches, whose spires formed a series of beacons on every projecting cliff.

The town of Sydney is divided by Spanish Bay into three distinct settlements, North Sydney, South Sydney, and Sydney Bar. These places are six or seven miles apart, and have distinct local governments and post-offices, but are usually classified together as Sydney. A little steamboat plies from one to another every half hour through the day, so communication is easy.

Our ship lay at Victoria Piers, near South Sydney, where coal is easily secured direct from the mines. Some of our party went to South Sydney, but a majority took the steamboat for North Sydney, just across the bay. Disappointed at not getting mail at the post-office, we wandered through the town, purchasing little items of supplies which had been forgotten in New York. A Salvation Army meeting in the streets attracted us somewhat, but otherwise the village was dull and uninteresting.

The next day, Friday, was entirely consumed in filling the coal-bunkers, the members of the two expeditions in the meantime enjoying themselves in various directions. Some visited the settlements, while others explored the natural history in the vicinity of Victoria Piers.

In the afternoon the water of the bay looked so pleasant and inviting and the sun was shining so brightly that six of us took a plunge, but, as might have been expected, the water was found to be icy cold, and a very short experience satisfied our longings.

CHAPTER II.

CROSSING THE GULF OF ST. LAWRENCE.—OUR FIRST ICE.—AN
ABANDONED BOAT.—IN THE MIDST OF THE FLOE.—NEW-
FOUNDLAND FISHERMEN.—OFF FOR CAPE DESOLATION.

WE left Sydney at 8.30 P. M., June 12th, the night being clear and the water smooth. The ship was heavily loaded with coal at Sydney, having taken on one hundred and eighty tons additional, which was piled everywhere. The hold and bunkers were full, and there was also a large amount on deck, altogether making three hundred and twenty tons, sufficient, it was hoped, to take us up to the far North and return.

Steaming along the east coast of Cape Breton Island, Sydney harbor was left behind and we passed into the Gulf of St. Lawrence. The only thing we saw during the day was an American fishing-schooner which was lying at anchor. This was the last vessel sighted until the harbor of Godhavn in Greenland was reached. Toward evening the wind and waves rose and the ship pitched and rolled heavily, making many of the party seasick and the decks wet and uncomfortable. The next day the weather had moderated somewhat, but the water was still rough.

We had by this time passed the entrance of the Gulf of St. Lawrence and were approaching the western coast

of Newfoundland. As we neared the land the shore was seen to be rugged and picturesque, with patches of verdure coming to the water's edge. Many small land-birds came about the ship, and several lighted on it, but only remained a short time and then flew landward.

All that day we sailed along the Newfoundland coast with land constantly in sight. Night coming on, brought fog with it. This was so dense that it was necessary to keep the fog-whistle blowing until morning in order to warn any possible fisherman that might be cruising in the vicinity.

In the morning the weather was still foggy, and at about 7 o'clock several pieces of ice a few feet in diameter were seen floating past the ship. This caused considerable excitement, because it was the first ice seen and was strongly suggestive of future icy experiences. We had hoped to pass through the Strait of Belle Isle and into the North Atlantic unimpeded by ice, because of the favorable reports obtained at Sydney as to the strait being well open. It had been reported as navigable a couple of weeks before; but within an hour after seeing the first small piece we ran into heavy pack-ice—so heavy, indeed, that we were unable to steam through it. The thickness of the weather prevented any sight of the ice being obtained before it had barred our progress. This, our first view of what is known as floe ice, was highly impressive. It was in the form of large masses jammed tightly together, moving up and down with the waves and grinding against each other with a dull, rumbling, mournful sound, resembling surf breaking on

a lonely shore. The sight of this immense amount of ice so soon after leaving the quiet waters of Sydney Bay affected us quite markedly, and gave us some slight conception of what might be expected. A few sea-gulls flew about here and there, contributing to the weirdness of the scene. To add to the gloom, there was seen, some distance ahead, an abandoned boat. Whence it came no one knew. It was evidently a fisherman's yawl which had been cut through by the ice and cast adrift. It was a poor, useless waif in a sea of desolation, and we could not but experience a partly superstitious feeling as we passed it by. Was it a symbol of what might occur?



THE ABANDONED BOAT.

We remembered the dreadful tales we had all read of the final outcome of so many Arctic expeditions, and thought of the numbers of faithful men who had lost their lives by such an accident as had overtaken this boat. Sentiment, however, had but little enduring place in such a practical company. We steamed as near as possible to the castaway, but, finding no evidence of life, left it to its fate and again made our way toward the open water that skirted the ice-floe, hoping by so doing to find a clear channel which would enable us to pass the strait and emerge on the open sea.

The whole day was spent searching in vain for such

a channel, going backward and forward from one side of the strait to the other, but nothing was accomplished except the obtaining of views of the lonely shores of Labrador and Newfoundland. One channel, indeed, was found which appeared to lead to open water beyond, but after following it a couple of miles we found ourselves again blocked. The ice quickly closed in behind us, and we were unable to advance, our retreat was cut off, and there was but little prospect of being able to escape for several days. We were in the narrowest part of the Strait of Belle Isle, it being here but nine miles wide, and at this point the ice coming from the north becomes jammed and interferes seriously with navigation. Our journey could scarcely be said to have commenced, as we were only in the latitude of 52° north, while our ultimate destination was in the neighborhood of 78° . In other words, we had accomplished less than one-third of the distance we had designed to go, and this the easiest portion of the journey, yet we were apparently completely blockaded and with no visible prospect of release. At times the ice would open a little, when some slight advance would be made. Small clear patches of water were seen here and there, and on these were numbers of ducks. They were so tame and unaccustomed to being molested as to allow the ship to approach quite close. We shot many, and found them a desirable addition to our ordinary diet.

Later in the day the fog disappeared, and we found ourselves close to the Newfoundland shore. Here, near the edge of the water, were seen several small houses or

huts, evidently those of the native Newfoundland fishermen. A boat containing three men put off from shore, and after considerable exertion in working through the ice succeeded in coming alongside the *Kite*. They stated that many of the people were sick, and some had died. The disease appeared to be epidemic, and from what could be learned from them we judged it to be analogous to that known to us as "influenza." They said no ship had reached the settlement for many months, and that they were sadly in need of assistance. After having a long talk we gave them some medicines, and they left very grateful, taking along letters from several of the party to mail home, as a ship was expected to call in about ten days. These letters were received all right by the parties to whom they were addressed, but only after a long delay, for the strait, as we afterward learned, was closed for many weeks.

After our visitors had departed we made another desperate attempt to get the ship through the ice, but were again unsuccessful. In default of anything better to do, we resorted to fishing through the fissures or leads in the ice, and succeeded in catching a number of large codfish, which furnished a fine mess for supper and supplied us with plenty of good food for the morrow. Captain Pike assured us that we would have plenty of game and fresh meat on reaching Greenland, which of course was very encouraging information. The meat obtained at Sydney was hung up from the cross-trees, as the weather was sufficiently cold to preserve it without requiring to be stored in an ice-chest.

Having found it impossible to proceed onward, the ship was fastened to a large floe on which was a good-sized pinnacle, for the purpose of securing enough ice to replenish our water-tanks. The sailors were some time in cutting and storing large pieces which were to be melted as fresh water was required. While they were at work our party wandered over the ice, indulging in snow-balling one another and taking photographs. Several good pictures were obtained of the vessel as seen from the ice-floe, and on our return to the ship we all enjoyed a good supper of fresh codfish and potatoes. To the north and south ice was seen as far as the eye could reach; to the east was the Newfoundland coast, and on the west were the bleak shores of Labrador.

Night setting in found us still fast in the ice, with the weather getting colder, and we were glad to seek the comfortable cabin with its cheerful coal fire. The sound of the grinding and groaning ice was our lullaby that night. None of us regarded our position as serious; indeed, the captain, who was an old sailor in Arctic seas, told us that it was a usual thing up this way, and was owing to a late summer. We were all satisfied with this explanation, and only eager to escape from our imprisonment. On one of the two following days, while still in the ice-pack, some of the party visited a large iceberg about four miles away from the vessel. They returned quite tired and exhausted, as climbing over the rough ice was no easy task. They had remained away so long and the weather became so foggy that the captain grew uneasy as to their ability to find the way back. Two of the

Newfoundland sailors were just about starting in search of them when they were discerned approaching. Had the fog been a little quicker in coming up, they would probably have found it impossible to regain the ship, and would have had to remain on the ice all night. This illustrates one of the difficulties and dangers of Arctic travelling, and served to warn the less experienced of the risks incurred in wandering too far away. Later, the weather having cleared, it was found possible to force the ship a few miles further through the pack, and by working all night about thirty additional miles were made.

At this season of the year, in these latitudes, daylight begins at 2.30 A. M. and lasts until 9.30 P. M., so there was much more time to see to navigate the ship than when farther south.

A strong wind afterward springing up from the south moved the ice, and the ship with it, in the direction we wished to go. By this time we were opposite the lighthouse on Cape Norman, which is the north-western extremity of Newfoundland. Although surrounded by ice, and the temperature at 40 degrees Fahrenheit, it did not seem at all cold, and we were able to be out on deck in our shirt-sleeves, with no heavier clothing on than when we left home. This feeling of warmth was attributed to the reflection of the sun on the ice, and the explanation was made to appear all the more plausible by our getting much sunburnt during the time of our confinement in the ice-floe. Soon after the sun went down the air became markedly colder and the thermometer de-

scended to about or below freezing-point, making us all appreciate the comfortable quarters below decks.

The ice now became more broken and loose, and at daylight we again endeavored to force our way through the floe. A strong wind from the south having come to our aid, assisted us in our progress. By noon we had reached the southern end of Belle Isle. The lighthouse on the bluff ran up the British flag, which courtesy was returned. Belle Isle is situated at the northern end of the strait bearing the same name, and is a bold, rocky island one mile wide and nine miles long. The only buildings on it are two lighthouses, situated one at each extremity, north and south. There is also a building near the southern light, containing supplies to be used in case of shipwreck. The light on the upper end of the island is the most northern one on the eastern shores of the American continent, there being none in Greenland or Labrador. The former place is only accessible in the summer months, and is situated so far north that during that season there is continual daylight, and thus the necessity for a lighthouse does not exist.

The keepers of the light at Belle Isle must have looked upon us as the harbingers of summer, as the captain said that our ship was undoubtedly the first one they had seen since the previous year, navigation closing in those waters early in November. We were all anxious to go ashore to leave letters for any passing vessel that might call and take them on their way south, but were unable to venture out on account of the danger of attempting to force a small boat through the loose and

dangerous ice intervening between ourselves and the shore. This ended our hopes of sending any further communications home, unless we happened to have the good luck to encounter a ship on its way south.

As soon as the strait is known to be open this route to the river and Gulf of St. Lawrence is taken by merchant and fishing vessels, because it is the shortest between the Old World and the New. At this season of the year it is generally avoided, but on our return voyage we passed several vessels bound to the strait for cargoes of cod-fish. These are caught and dried by the fishermen, and afterward shipped to points in the West Indies, Central and South America, and Europe. Early in the season it is comparatively rare that vessels attempt to force the dangerous passages of the Strait of Belle Isle.

There was a possibility of our meeting vessels bound from the far North, but this was extremely improbable at this period of the year. Almost the only ships that traverse what is known as the Greenland Sea are whalers on their way home late in the season, and, farther north, a few from Denmark to their colonies in Greenland.

Our course was set a little west of north, heading for Cape Desolation, which is somewhat to the westward of Cape Farewell, the most southern extremity of Greenland. The passage across Greenland Sea was expected to be accomplished in from six to eight days, provided no detention was occasioned by the ice, which might be encountered at any time, and the winds were favorable. The water being clear of floe ice, we steamed at about eight knots an hour, having the wind in our favor. The look-

out was stationed at his post in the bow, watching for icebergs. Night was coming on, and as several had been seen early in the day, we feared that there might be others in our path. The night, fortunately, was clear, and the moon gave plenty of light, so that by keeping a sharp watch ahead any approaching bergs could be seen in time to avoid a collision.

With early dawn came a north-west wind which increased all day, until by nightfall it was blowing a gale. Our heavily-laden ship was still deep in the water, not enough of the coal having yet been used to lighten it to any appreciable extent. The large amount of coal on deck rendered the ship more unwieldy than it otherwise would have been, and it pitched and tossed frightfully in the large waves which every now and then broke over the sides. Everything above was cold and wet, and it was almost impossible to stay on deck with any degree of comfort or even safety. Many were again taken seasick, and sought their bunks, not, however, to enjoy much rest, the tossing of the little ship rendering that impossible.

The gale kept up all night, and Sunday found it more violent than ever. The cook's galley, a small house on deck, was nearly washed away by the sea, and so damaged as to require repairing before it was possible to obtain any cooked food. As many were seasick, we were not greatly agitated over the accident, knowing that we would not want anything from that quarter for a day or two. The gale, after continuing about three days, at last began to subside. It was remarkable that

in these high latitudes, where one would expect continuous cold, as long as the sun was shining the air felt balmy. To be sure, the sun only hid himself for three hours, and a few days later we had his presence all night. Until 11 o'clock P. M. one could easily read ordinary print on deck, even at this early stage of the voyage.

CHAPTER III.

FIRST SIGHT OF GREENLAND.—ICEBERGS.—DISKO ISLAND.—
ARRIVAL AT GODHAVN.—VISIT OF ESKIMOS.—DINING WITH
THE GOVERNOR.—NATIVE HUTS.

ON June 23d, toward evening, we caught our first sight of Greenland. The land was many miles away, appearing as a narrow, dark cloud on the horizon. All through the long Arctic twilight we steamed toward it, the outline becoming more irregular, but the peaks still seeming as far off as ever. What we saw were the mountain-tops back of Cape Desolation, and at this long distance it seemed to deserve the name which it bore.

Rugged peaks, overshadowed by a cold, dead sky, were all that we could distinguish; on approaching nearer, however, we had our first glimpse of how beautiful an Arctic scene might be. A vast mass of icebergs of fantastic forms, many of which might be compared to church-spires or ruined castles covered with snow, were encountered. Their varied forms pleased us, and we remained on deck until late in the evening admiring them; but the most beautiful sight was one that presented itself later, when the moon rose and illumined with her silver light their snow-clad cliffs. As we passed them one after another, they loomed up, inky black, against the twilight sky, and had a weird fascination which kept us on deck for many hours.

These icebergs, as Captain Pike informed us, were fragments of glaciers on the eastern shore of Greenland, which, swept around Cape Farewell by the ocean currents, sail slowly up the western coast until deflected by the great Arctic currents, and are carried down the east coast of North America to the open Atlantic. Only the largest and oldest of these bergs survive their long journey; the rest are melted and dissipated by the warm water and air which they meet as they float southward. Those that remain are the terror of the transatlantic seamen, for they float in the direct course of the shortest possible route between the great points of departure of the two continents. When these fragments of the great ice-fleet are met with, the mighty steamer is in great peril, and the captain shows his sense of her danger by his constant watchfulness and extreme care; but the *Kite* being of different build, Captain Pike's placidity was not even disturbed for a moment by the sight of these monsters. Notwithstanding the abundance of icebergs which lay in our path, the ship kept on her course, except that the ice-pilot would occasionally throw over her helm to avoid what he called "knocking her toothpick out of her mouth"—that is to say, losing her jib-boom.

The great procession of bergs continued all night, but as the ship reached the desired point opposite Cape Desolation, and her course was turned northward, they were gradually left behind and sailed majestically on their journey.

After passing Cape Desolation we had beautiful, warm,

sunshiny weather, allowing us to be on deck all the time. The days were very agreeable, and, having now crossed the Arctic Circle, we were favored with continuous daylight. This enabled us to see all that was passing at any time; but having no darkness affected us strangely, producing such a feeling of wakefulness that it was hard to tell when we ought to go to sleep.

At this time we were passing along the western coast of Greenland, which was only twenty miles distant, its rugged outlines being clearly visible in the brilliant sunshine, while the tops of its snow-clad mountains were distinctly outlined against the blue sky in the distance. The immense icebergs which were constantly passing always interested us. Their ever-changing forms and beautiful clear blue color were never-ceasing objects of comment, and constantly challenged our admiration. The continuous daylight and radiance of the sun, together with the magnificence of the bergs and the anticipation of still more wonderful revelations, so aroused us that it destroyed all desire for sleep, and made us feel as if we were on a summer pleasure trip at home, rather than steaming amidst the ice of Arctic seas. The island of Disko was sighted on June 25th, in the afternoon, and although seventy miles distant, it was nevertheless, owing to the clearness of the atmosphere, distinctly visible to the unaided eye.

On this island is situated Godhavn, the principal settlement of Northern Danish Greenland. This settlement is on the south side of the island of Disko, in latitude $69^{\circ} 17'$. It is about half a mile from the sea, and

to get a good anchorage it is necessary to enter the fiord or bay for this distance. The settlement is not visible from the ocean, being hidden by the mountains at the



GODHAVN.

entrance of the fiord; indeed, were it not for the two stone beacons placed to mark the spot, one would have been liable to have passed it by unrecognized. Godhavn was the first place at which we called after leaving Sydney. The scene at the mouth of the harbor was truly magnificent, three large icebergs seeming to guard its entrance; one, about three hundred feet in length and a hundred and fifty feet in height, was shaped like an immense arch,

with an opening large enough to permit the passage of a vessel the size of our own with topmasts housed. From the level of the sea to the top of the arch was quite seventy feet, and it was as regular and beautiful a semicircle as ever seen in our large stone bridges at home. The pale blue ice, with its surface covered with snow and frozen hard enough to glisten in the morning sunlight, surpassed in color and beauty anything that man could form from purest marble, and was a sight never to be forgotten.

On our arrival in front of the town a whale-boat left the shore, manned by half a dozen natives, who, coming aboard, guided our ship to a safe anchorage opposite the governor's house. Some of these men spoke a little English, which had been acquired during the visits of whalers. By means of their small stock of this language, eked out with additional signs and gestures, they informed us that our vessel had been sighted several hours before, by some of their companions, from the mountain height adjacent to the village.

The harbor of Godhavn is land-locked, and is as snug and pretty a little harbor as one ever sees. On the north side the mountains reached over three thousand feet in height, their tops being covered with snow and ice. Toward the base they were greenish in color, which was due to a scanty growth of mosses and lichens. There was not a tree to be seen anywhere; indeed, we soon learned that in Greenland trees as we know them do not exist. To the south the ground was low and rocky, and in the water beyond a number of icebergs could be seen.

The land contained enough soil to furnish subsistence to a small amount of vegetation, which added a pretty green to the landscape.

The anchor was dropped and a salute fired, which was responded to by one from the land, and Captain Pike with Lieutenant Peary and Prof. Heilprin went ashore and called on the inspector, Mr. Andersen. The letter of introduction from the Danish minister at Washington, together with other papers explaining our mission in Greenland, was shown to him, and he received the visitors very pleasantly, hoping that their stay at Godhavn would be an enjoyable one.

After their return to the ship nearly all the party landed and proceeded to investigate the village and surrounding country. The few remaining on board received a visit from the natives, who came to the ship to trade and gratify their curiosity. They proved so interesting that I decided to stay aboard all morning.

The first sight of the Eskimo is disappointing. It is true that they are squat in figure and swarthy, but those which we saw at Disko were not so remarkable in face or form as to have attracted attention in any port where foreign sailors abound, except for their skin costumes. Even these costumes would not have been particularly noticeable had it not been for their filthiness. We felt the same disappointment that many of us had experienced at seeing the Western Indians, when, instead of a noble savage, or even a semblance of the caricatures one sees of the Indian in high hat and red blanket, we found men like ourselves, dressed in fairly civilized fashion, and at

first sight not remarkable for anything. This first impression, however, in both cases soon wears off. The physiognomy, race characteristics, and customs are seen to differ widely from those of other nations, and an interest all the more intense on account of its previous absence was felt in studying this (to us) new variety of mankind.

About noon a couple of natives rowed me ashore, and after a few minutes spent in looking about the settlement I met the inspector, the governor, and a passenger from the only ship in the harbor, a small Danish brig. This gentleman, Mr. Koch by name, had arrived a few days previously from Denmark, and was awaiting an opportunity to proceed southward to take charge of one of the other settlements. They were standing in front of the governor's house, talking, as I approached and introduced myself. Fortunately for me, they all spoke some English, and we were soon conversing about the expedition.

A delightful half hour was thus passed, after which I received an invitation from the governor to dine with him. On my accepting, we entered the house and were ushered into the parlor, through the open doorway of which, leading to the dining-room, could be seen the servants preparing the meal. The savory odors of the food, the spotless linen table-cloth, and home-like surroundings were indeed an agreeable change from ship-life. The party at dinner, which was soon announced, consisted of the governor and his wife, Mr. Koch with his wife and child, and myself. Then followed a most

enjoyable meal. It began with a soup of most delicious flavor, made from the eider-duck, followed by broiled eider-duck breasts and potatoes, with bread and wine. A dessert of jelly and almonds ended the repast. The variety of the vegetables was necessarily restricted, because they had all to be brought from Denmark, and communication with that country is only possible during the summer months.

The servants seemed to be quite familiar with their duties, and moved about noiselessly in their soft skin boots. A slight look or gesture from the host or hostess was readily understood and immediately obeyed. They were Eskimo women, and dressed in fur trousers with fancy-colored soft leather boots which reached to the knees; a short jacket made of the skin of the hair seal and a fancy handkerchief or cloth about the head completed their attire. It was indeed a sensible costume, and both becoming and picturesque.

The conversation at the table, which was principally in the Danish tongue, was kindly translated for me, from time to time, by Mr. Koch, who spoke English with considerable fluency. This courtesy, and the kindness and geniality of the host, added considerably to the pleasure of the occasion. On rising, at the conclusion of the dinner, those at the table shook hands with their host and with one another, and exchanged greetings. This was an ancient Danish custom, and is generally practised among the Danes in Greenland. The gentlemen then retired to another room, where coffee and cigars were served.

On leaving, soon afterward, we made a tour of the settlement. It consisted of the inspector's house, the governor's house, a store, the assistant governor's house, a small chapel, a cooper and blacksmith shop, a storehouse near the edge of the water, where the ships unloaded, and about thirty or forty Eskimo huts. All



INSPECTOR'S HOUSE, GODHAVN.

the buildings except those of the Eskimos were made of lumber brought from Denmark. They were about a story and a half high, with steep peaked roofs covered with pitch. The windows, and the panes also, were quite small, both the windows and the doors being deeply cased to provide against the bitter cold of winter. At

this season of the year the double windows were unnecessary, for the temperature was about the freezing-point and in the bright sunlight it was quite warm. Both the sides and roofs of the houses were covered with coal-tar, and the casings and window-sashes were painted white, the contrast of the two colors producing a striking and by no means unpleasing effect. All were scrupulously clean, and presented a neat and cosy appearance. Several houses were fenced in, and nicely-kept pebble walks led up to the front door.

As one entered, he found a short hall from which two doors opened; one of these led into a sitting-room, which was also fitted up for the transaction of business relating to the colony. This room was quite cheerful and neatly furnished, containing a piano, a book-case filled with books, and other evidences of refinement. There were windows on three sides of the room, which looked out on the bay and the pleasant landscape around. The other door, on the opposite side of the hall, gave access to the living-rooms of the family. I did not see the upper rooms, which must have been small, and were possibly used for storage purposes or for the accommodation of the servants.

On the sheltered side of the house, under one of the windows, was a miniature garden five or six feet square. It contained lettuce, peas, and one or two other hardy vegetables. This garden was more a thing of ornament than service, as the amount grown in it was insignificant and the short season prevented the plants from becoming properly matured. It was inclosed by a neat and pretty

fence of wood, which resembled the toy fences used to surround our Christmas trees.

The houses have no cellars, being built on the solid rock or on ground which is frozen perpetually from a few inches below the surface, the sun during the summer months thawing the ground to the depth of only half a foot or more, depending on its situation. There were but three of these wooden dwelling-houses, the inspector's, the governor's, and assistant governor's.



CHAPEL AT GODHAVN.

The chapel and storehouses, built also of wood, were painted black with white windows, similar to the dwellings.

The chapel was situated on the top of a hill in the rear of the village. While not large, it was nevertheless

attractive-looking, and resembled in general the small Lutheran churches of Northern Europe. It possessed a single room with wooden benches, and was used for both church and school purposes. In the front was a rather elaborate altar, also used as the schoolmaster's desk. An organ and a blackboard completed the furnishing of the interior, with the exception of a number of gaily-colored religious prints on the walls.

The storehouses were nothing more than large barns, strongly constructed to withstand the storms of winter.

The Eskimo dwellings were huts built of turf, with a roof made of boards covered with the same material. They were about fifteen feet square, and usually built on the slope of a hill. Each house contained a single window with a sash of glass composed of several panes. They were entered by a tunnel about ten feet in length and two or three feet in height, running out from its side. Before entering, it is quite essential to call to some of the inmates, who then knock out two or three of the ugly-looking dogs which congregate in and about the openings of all the huts. After this precaution one goes down on hands and knees and crawls through the tunnel, a small door giving admission to the hut. The interior consists of but one room, half of which has a floor of wood raised a couple of feet above the ground. On this the inmates spend most of their time, eating, sleeping, and working. The rest of the room is given up to cooking, curing of skins, and the storage of hunting and other implements. The raised floor is necessary to utilize the heat and warmth of the room, which

is greater nearer the roof. The height inside the hut from the ground to the roof is hardly seven feet, it being impossible for any except the smaller inmates to stand upright when on the platform.

There is a very perceptible odor of fish and grease about the inside, and generally a pot of fish and blubber



NATIVE WOMAN AND CHILDREN, GODHAVN.

is boiling over a smoky fire. The fuel used is seal oil and turf, the latter of which I saw them piling up outside the hut for future use. The Danish government provides the natives of the settlement with large cast-iron stoves, and each hut contains one of these, the pipe from which pierces the roof. The walls are usually hung

with hunting implements, clothes, occasionally some cheap prints, and a few other articles. On the platform were the skins on which the inmates slept: they were mostly those of the reindeer and birds sewn together. When not in use these furs are usually rolled up and packed away with a miscellaneous collection of unfinished clothing, little boxes containing sewing implements, trinkets, and children's playthings. The whole platform was sometimes littered with these things, for here the work of the household was done and the little children played. Many of the huts were filthy in the extreme, though in those of some of the better class of natives the platform was quite neat.

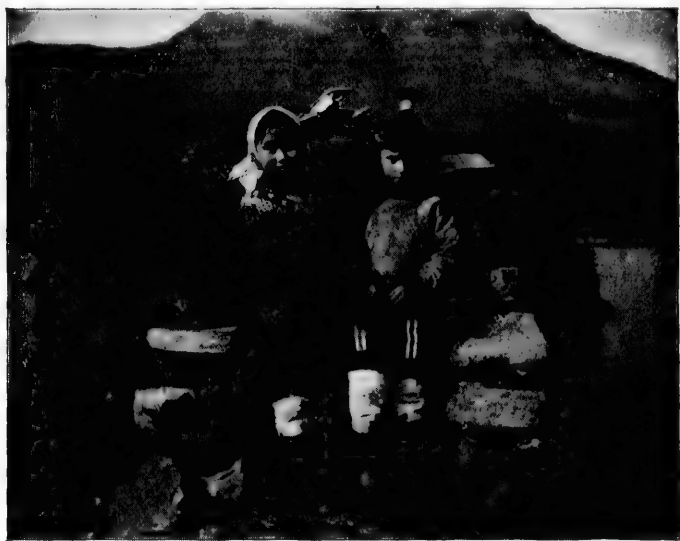
The floor itself was always strewn with fragments of skin, pieces of dirty blankets, and other offensive matter, which amply accounted for the vile odors encountered on entering.

The total number of inhabitants in Godhavn was about one hundred and fifty; of these about a half dozen were the Danish officials and their families, the rest being Eskimos.

The inmates of the native huts numbered usually six to eight in each. They seemed to have a number of children, who were as a rule bright and interesting. Almost all of the natives were of the color of our North American Indians, but the face is broader and has none of the fierce and stolid look of the American savage. They are much smaller in stature, their hair is jet black, straight, and, in the case of the men, not allowed to grow over four or five inches in length. In the women, how-

ever, it is much longer, and evidently receives considerable attention.

The married women are distinguished from those who are single by having their hair twisted in the form of a roll, four or five inches in height, on the top of the head and tightly wrapped with cord. The single women dress their hair in various styles as fancy dictates, the



YOUNG ESKIMO GIRLS AND NATIVE HUT.

female children wearing it sometimes like that of their mothers, as shown in the illustration.

I saw not a single slovenly-looking woman, and if they had not such an abominable odor of grease and rank fish oil about them they might have been quite attractive. They were able to obtain from the store in the settle-

ment fancy-colored cloths, beads, etc., and with these they made and decorated their picturesque fur costumes.

The men are neither so well dressed nor thrifty looking, much of their clothing being composed of the cast-off garments of sailors. Many of them wore pantaloons of



STOREHOUSE AND GROUP OF NATIVES, GODHAVN.

seal-skin, skin boots, and, at this season, a combined hood and shirt called "neitsek," made of a rather heavy calico sort of material supplied by the government. They were quite anxious to trade anything they had for cloth pantaloons, but as they desired only those which were in good

condition, we had very few to spare. They wished to have them for two reasons: first, to satisfy a desire to imitate the European method of dress; and second, as being a more comfortable article of clothing for summer use than their own seal garments.

CHAPTER IV.

A NATIVE DANCE.—POLARIS HENRICK.—RELIGION OF THE ES-
KIMOS.—MODE OF GOVERNMENT.—MOSQUITOES.—A PLUNGE
IN THE ARCTIC OCEAN.—THE NATIVE APPETITE.

ON the following day I was fortunate enough to meet Mr. Carstens, the assistant governor. He had been busy, previously, supervising the unloading of supplies from the Danish brig in the harbor, but the day being Sunday, all work in the settlement was suspended, and he was therefore at leisure. Most of us went ashore to see a native dance which took place in one of the storehouses. This dance it is customary to have during the stay of the Danish ship in port, the petty officers and crew also taking part in the festivities, which constitute one of the inducements held out to them to visit these out-of-the-way shores. I was told that the Danish government had considerable difficulty in getting desirable crews for this trade, and so allows a dance and Sunday ashore to the men, to vary the monotony of their long and dangerous voyage to and from Denmark. The ships are quite small, generally brigs or barks, and are rarely manned by over ten men; there were about this number of sailors present at the dance, and they seemed to enjoy themselves hugely. Everything was quite orderly, and the good behavior of all was much commented on by us.

Several of our sailors also took part, greatly to their delight, and some of the members of our own party did not refrain from joining in the more familiar dances, which consisted principally of a mixture of hornpipes, jigs, and quadrilles, evidently learned from the sailors of whaling ships that had been calling here for years. Most of the dances included the clapping of hands and stamping of feet, not unlike our Indian war-dances. The music was made by two old Eskimos with fiddles, and it was very evident that this accomplishment originated from the same source, as three or four of the tunes played were a medley of Negro and Irish tunes that were familiar at home. I sent to the ship for a guitar, and accompanied this "orchestra" for some time. They played quite well both as regards time and tune, and I had not much difficulty in keeping with them. The natives seemed quite pleased with this addition to their music, and looked much and curiously at the guitar. It was evidently the first one ever seen in the locality, and produced quite a sensation. The natives were found extremely fond of music.

Mr. Carstens, who was so kind and courteous during our short acquaintance, gave me a large amount of valuable information about this peculiar and interesting people. During his residence of over four years he had acquired considerable knowledge of the subject, which, with the information he had obtained from other sources, made him a most charming and interesting companion.

He informed me that the natives were looked after by the Danish government. They are well-behaved, hon-

est, and spend their time in the spring catching seals and walrus and obtaining skins, ivory, and oil, which are sent to Denmark. They receive their pay in a special kind of money, consisting of coins and scrip made for this purpose in Denmark. It is taken in payment at the store for goods sold to the natives.

Inspector Andersen pointed out to us a lad about eighteen years of age as being the son of Hans Henrick, the Eskimo hunter, guide, and companion of Kane and Hayes, and mentioned so often by them in their famous books on Arctic travel and hardships. The young fellow is now an orphan, and lives with his step-mother. His smiling face and cheerful disposition show that he is evidently contented with his lot. He enjoys the distinguished name of Polaris Henrick, having been called after the United States steamship *Polaris*, which during Hall's expedition, in the year 1872, was crushed in the ice.

The boy was interesting from the fact of his having been born on an ice-floe at a time when the *Polaris* was firmly locked in the ice, in latitude $78^{\circ} 30'$, and in imminent danger of being crushed. Fearing the destruction of the vessel at any moment, some of the crew had encamped on the ice a short distance away, while the rest remained on board. A violent gale broke up the ice, and the floe on which the encampment was situated floated away. Those who were on the ice comprised Captain Tyson the ice-pilot, a few of the crew, and the Eskimos who had accompanied Hall's expedition. The immense floe, with its living burden, drifted about on

the open sea for six months, when the survivors were rescued by the steamship *Tigress*, in latitude $53^{\circ} 35'$, off the coast of Labrador, having successfully made the remarkable drift of nearly fifteen hundred miles and lived through the rigors of an Arctic winter.

The religion of the Eskimos, as was learned from Mr. Carstens, is somewhat indefinite and uncertain. At the settlements, where the Danish missionaries have labored with the natives for many years, they might be called theoretical Christians. They do not appear to be able to grasp the idea of a Deity as commonly understood, and have even a slighter conception of original sin. They cannot be made to comprehend how the sins of their fathers for generations can in any way affect them, and it is very doubtful if they have any exalted opinion of the superiority of the Christian Church over their own vague ideas of a future life. A total indifference is felt to the existence of hell as a possible future dwelling-place. This may be partially due to having passed their existence in such an utterly desolate land that they cannot imagine an abode more miserable. The sun, moon, and Great Spirit they regard as having an indefinite something to do with their past, present, and future state. At Gedesmunde and Jakobshavn, two settlements below Godhavn, are two holes or sacred caves, into which the Eskimos, on passing in the course of their hunting trips, throw bits of blubber and meat. This is about the only sacrifice they are known to offer up to the Great Spirit. Mr. Carstens thinks that their apparent devotion and regularity in attendance at the little chapel is due

largely to their great passion for music. They never tire of the music of the small organ, and singing to its accompaniment affords them the greatest pleasure.

The Eskimos are a peaceful, harmless people among themselves and toward the whites. No authenticated case of a white man being killed by an Eskimo has ever been known in Greenland, and but three cases of murder amongst the natives themselves have occurred in the history of the settlement at Godhavn. The perpetrator of one, a case of infanticide, was punished with the administration by the inspector of forty lashes on the bare back. The second case, if it can be classed as a murder, was of a somewhat peculiar nature: In one of the families there was a young girl, who, being insane and a burden to her people, was sentenced at a family conclave to death. Some carbolic acid, which had been left for dressing a wound by the doctor who visited Godhavn twice a year from some of the southern settlements, was given to her, but then, as the narrator said, "she became crazier than ever;" thereupon a second dose of a larger amount of the drug was administered, and she fell insensible. Supposing her dead, she was taken by her relatives and hurriedly buried beneath a pile of stones. They maintained that she was really dead when buried, but information imparted by others made it look as though this had not been the case, and that she was alive when interred. Owing to the doubts in the case, no punishment was inflicted in this instance. The last murder was that perpetrated by a man who was seen, in his kajak, to approach a large skin boat or "umiak"

containing nine persons. He deliberately plunged his knife into it, sinking the boat and drowning the entire party. The murderer escaped punishment, as the natives refused to act in the matter and the three Danish officials had not the courage to act themselves as his executioners. The murderer is still occasionally seen near the settlement, but is prohibited by the governor from living in it. When asked what their home government had to say about it, their reply was, "Nothing." To send the fellow three thousand miles to Denmark to be executed was nonsense, while to make executioners of the two white men here (the inspector often being absent) would be an unreasonable procedure in view of the indifference shown in the matter by the natives themselves. So the discussion closed by an invitation to any of our party who so wished, to add his carcass to their collection if they desired a specimen of that nature—an invitation which, I need hardly say, was not accepted.

The natives themselves are allowed to settle the disputes and difficulties arising among them: these are but few in number and only of a most trivial nature, the community being as quiet and orderly a one as can be found anywhere. The ordinary disputes are those arising in the division of the spoils of the chase or some domestic matters, and are punished by depriving the offender of a part or all of his share. If the offense is serious enough, his effects may even be taken away from him and divided amongst the injured parties. Sometimes the governor takes cognizance of an offence by

depriving the culprit of his supplies from the government store.

The natives have the greatest respect and affection for the Danish officials. The strength of this attachment is shown by the following occurrence: Some years ago an inspector and native, on going over the ice to a distant settlement, became separated from the shore by the formation of a crack or seam. The native was able to jump across the fissure, but the inspector, being a much heavier man and unused to such feats, found it impossible to follow. The native was unwilling to leave him and proceed to the settlement for assistance unless the inspector furnished him with a note stating the nature of the accident, and thus relieve him of blame. This the inspector refused to do, and the native remained with him, determined to share his fate. Fortunately, the next day the ice came together and enabled both to proceed on their journey in safety.

Many of the Eskimos in Danish Greenland show unmistakable signs of admixture with the white race. The resemblance of many of them to Europeans both in color and physiognomy was quite marked, being due to the intermarriage of the natives and Danes practised in the early history of the settlements. This was encouraged at that time by the Danish government, with the idea of civilizing the inhabitants and improving their condition, thus making them a more desirable class of colonists. The result of the experiment was, however, far from satisfactory, and they were forced to abandon it long ago. Instead of the half-breeds being better than the pure

natives, I was informed that they retained all the objectionable characteristics of the Eskimos plus the vices and bad habits which the Danes themselves had imported. So injurious were the effects found to be that, some time later, the Danish government negotiated treaties with foreign nations, having the especial object of protecting the natives by preventing all intercourse between them and visitors to their shores except under the strictest precautions and after a special permission had been obtained from the home government. A copy of the law on this subject, now in force, was handed to us by the governor of Upernavik. Its contents are given under the description of our visit to that place.

It has been found almost impossible to civilize or elevate the native population to any marked extent. The white inhabitants are too few in number to exert any great modifying influence. If they arrive in the settlement after having grown to adult age in a more civilized country, then, of course, they retain their accustomed manners and mode of life; but if a child is born to any of the Danish residents in Greenland, they do not dare allow it to grow to maturity in the country of its birth, but soon transport it to a more civilized community. It so happened that just before our last visit to Godhavn, on our way home, one of the Danish officials of the place had had a son born to him. While exhibiting great delight at this addition to his family, he at the same time expressed great regret that it would be with him but a short time. He stated that the children who were born of Danish parents and reared in Greenland invariably

acquired the mode of life and habits of the natives. Their nurses and playmates are necessarily Eskimos, and, even when sent to Denmark at quite an early age to be raised and educated, it is difficult to eradicate the traits acquired from their Eskimo associates. This is indeed a sad feature of the life of the few whites in these far-away regions. The parents have to face the terrible alternatives of either seeing their children growing up ignorant and uncultured at home, or of parting with them in a short time and confiding them to the care of strangers in a more enlightened community thousands of miles away. The Danish officials in these settlements are cultured, intelligent men, and their greatest pleasure is of necessity their domestic life. The self-denial that it requires of them to send their children away to be raised can only be appreciated by those who have seen and felt the utter loneliness that pervades this desolate land. As a reward of their devotion, however, after serving a term of years in Greenland they may return to Denmark, and then receive a more desirable position in their country's service at home.

Godhavn is situated on a peninsula which was formerly an island on the southern coast of the island of Disko. This peninsula is joined to the mainland by an almost level stretch of sandy beach. Crossing this, the first object in sight is the graveyard where the Christian Eskimos lie buried. The rude wooden crosses and well-kept mounds made it look like a village cemetery at home. Many of the graves had wreaths of immortelles and little offerings upon them, and all showed the care

and attention which was devoted by the living to these resting-places of the dead. A simple wooden cross marked the head of each grave, and in this country, where wood is so valuable, this sacrifice represents a large amount of self-denial in order to keep alive the memory of the dead. Two graves interested us. One was marked by a grave-stone of white marble elaborately carved and evidently from Denmark. It marked the grave of Sophus Theodore Krarup Smith, formerly inspector of the settlement. The letters were deeply engraved in the stone and gilded, and a wreath of native flowers hanging about the arms of the cross showed that in the hearts of some at least their former ruler was not forgotten. The other grave was certainly that of an Englishman; a small cross bore the name David Hume, though who he was and whether or not he was a member of any Arctic exploring party we were unable to ascertain.

Just back of the cemetery rose a basaltic ridge forming a sort of retaining-wall to the great cliff which towered two thousand feet or more into the air. It ended on a level plateau, eternally snow-crowned and forming an inland ice cap exactly similar to that of the mainland of Greenland. Several of the party ascended the mountains under the guidance of Lieutenant Peary, who had lived at Godhavn several weeks on his former trip to Greenland. They described the climb as rough, but not excessively difficult, and the views from the mountain-top as indescribably magnificent. At their feet lay the peninsula and town of Godhavn, with Disko Bay



BLAUZY DAEI, OR WINDY VALLEY.

and Baffin Bay beyond. Both were dotted with great and little icebergs shining like silver in the sunlight. The ice cap was found almost as level as a floor.

Another party explored the valley of a river called on the map the Red River, which runs into Disko Bay about a mile west of Godhavn. It deserved its name, for the red mud which it carried down from the sandstone cliffs above gave it a decidedly reddish hue. It occupied what had anciently been a glacier's bed, and the beautiful valley (called Blauzy Dael, or Windy Valley) showed every mark of former glacier action. Protected by towering cliffs, it was, at the season we visited it, a perfect flower-garden of wild plants. Yellow poppies nodded on every side, while many other flowers, blue, red, and white, were found everywhere. The ground was carpeted with moss and a few grasses, while the apologies for trees spread their twisted limbs close to the ground wherever the roots could find a foothold. As the valley was ascended the view became magnificent, for the river ran through a narrow gorge at places more than a hundred feet in depth, and all around were towering mountains from which icy streams ran and dashed in foaming cascades over the cliffs into the water below. Looking backward, Disko Bay was seen, studded with icebergs, some huge in size, some only floating blocks of ice. The air was balmy, and the water of the bay lay calm and tranquil under the bright sun, and all was as pleasant as a spring day in our own country. Birds and insects flew about us; among them were the snow bunting and several pretty little butterflies of various hues. Altogether, it

was hard to realize that one was so deep in the land of the midnight sun.

We had another reminder of home in the shape of mosquitoes, which flew about us in clouds whenever we reached the lower levels. They were hardly as venomous as our New Jersey product, but at times were very persistent and annoying. The only things that failed to remind us of a land nearer home were the absence of upright trees and the presence of the icebergs. The trees, so called, were mere bushes, perfectly flattened to the ground, and sending up a few shoots six or eight inches high, but with leaves and flowers exactly like those of our own willows. They often formed convenient cushions when we wished to rest.

After we had returned to the ship Mr. Verhoeff declared that the water looked so pleasant that he would swim from the ship to the shore and back again. Those who heard the assertion attempted to dissuade him, pointing to the numerous icebergs which floated about in every direction. Even when he stripped we all thought that a single plunge would serve to make him change his mind. Meanwhile a crowd of curious natives had gathered around, and were gazing at him in mild astonishment. Finally he took the plunge, and at once started swimming vigorously for the shore. Alarmed for his safety, and fearing that a cramp might overtake him, I jumped into Mr. Carsten's little boat, which was moored alongside the ship, and followed him, being prepared to render assistance if it was needed. He reached the shore in safety, however, and, turning resolutely around, swam

back to the vessel, a distance of about two hundred yards. He received, of course, an ovation, but was almost at once taken with a chill which at one time looked serious. A vigorous rubbing restored his circulation to its normal condition, and a brief rest made him as well as ever. It was regarded, however, as a foolhardy feat, and one which none were anxious to emulate. The effect on the natives of the sight of a swimming man was most curious. They regarded him with constantly growing astonishment. In Greenland the only use they know for water is for drinking purposes. Probably many of them had accidentally fallen into the water, but they dread and hate its effects as much as does a cat. They know nothing of the art of swimming.

During the stay of our ship at this place the natives were constantly coming and going aboard of it, and we were told that during the time a vessel is lying at anchor in the harbor they sleep but little. Midnight being as bright as mid-day, and having no knowledge of time or clocks, they did not seem to understand that the rest of us needed some repose. They appeared to have no regular time for sleep.

Notwithstanding the freedom allowed the visitors, we did not miss anything, and they were permitted to roam about at pleasure.

Their favorite resort was the cook's galley. Here they eagerly sought any remains of food or refuse he was pleased to give them, and devoured it greedily. Their capacity was simply enormous. To test it the experiment was made on a veteran who had established for

himself a reputation for gormandizing which was "founded on a rock." It was said that he and his wife, having killed a seal at some distance from the settlement, sat down on a rock and proceeded to devour the animal. A large proportion was consumed, and they ate until they were so engorged as to be unable for a day or two to start back to the settlement. We took this interesting individual down into the cabin, and, after the party had finished their meal, began feeding him on the remains. Salt beef, bread, potatoes, coffee, vegetables, and everything edible disappeared down his throat with startling rapidity. He ate, and ate, and ate, until, after having consumed more than enough for four or five men, and still showing no signs of being satisfied, he was requested to stop and escorted up again on deck. After witnessing his performance none of us had any doubt as to the truth of the story concerning his gastronomic operations on the seal, as just detailed.

CHAPTER V.

FAREWELL TO GODHAVN.—ARRIVAL AT UPERNAVİK.—NOTICE
TO MARINERS IN THE DAVIS STRAITS.—THE SETTLEMENT
AND ITS INHABITANTS.—DUCK ISLANDS.

ON Monday, June 29th, we had intended leaving Godhavn early in the morning, but the weather being thick and misty, we could not get out of the harbor until the fog lifted, which occurred about noon-time. Mr. Koch, his wife, and little daughter arrived on the ship a few minutes before sailing-time, to say good-bye. Mr. Carstens also came to bid us farewell. He came out in a small skiff propelled by two paddle-wheels, one on each side, which he worked by means of a crank while seated in the centre of the boat. It was an ingenious little craft of his own construction, and was named the *Fulton*. After he departed we weighed anchor and gave a parting salute, which was answered from the shore, and we then bade good-bye to the pleasant little place. We had enjoyed our stay very much, and hoped to have the pleasure of repeating it on our return from the regions farther north.

We were soon again on the open sea, sailing northward toward Upernavik.

The change from the strange sights at Godhavn to

the quiet monotony of the ocean was not ungrateful, for all were rather tired from our experience while in port.

We steamed northward along the coast, in sight of the land, all that day, the whole of the following one, and until four o'clock the next morning, when we sighted Upernavik. This place is about one hundred and eighty miles north of Godhavn, in latitude $72^{\circ} 40'$. The coast between these two places resembled that below Godhavn. It was of the same mountainous character, and showed no peculiar characteristics.

In approaching Upernavik the harbor is even more difficult to discover than was that of Godhavn, there being no prominent landmarks in the vicinity. Captain Pike had, however, been there several times before, and found the entrance without difficulty. The approaches to the settlement are quite tortuous, it being necessary to wind in and out among several small islands before the place is reached. On nearing the settlement the customary salute was fired, which was responded to some little while after. We arrived during the time of the day when most of the inhabitants were asleep. A few natives, however, witnessed our arrival, happening to be up and about at the time, and they were soon joined by the entire population.

The governor and assistant governor came out in a boat to see us, but were not so agreeable as our friends at Godhavn. This may have been due, in part, to the weather, which was cold, rainy, and disagreeable, and also, perhaps, to our making them leave their warm beds at such an early hour. We too were not feeling very

sociable, caused, no doubt, by the abominable weather and by our having remained on deck without any sleep for many hours, waiting for our arrival at the settlement.



L'ÉCRAN.

The visit of the officials was of short duration and very formal. They read to us an extract from the Danish law governing these settlements, and left a copy, printed in

Danish and English, with Captain Pike. It read as follows:

NOTICE TO MARINERS IN THE DAVIS STRAITS.

The Board of Directors of the Royal Greenland trade make known:

1. It is agreed by treaties between the royal Danish government and the United States of America, Great Britain, and other States that the west coast of Greenland, between latitude 60° and 73° , be closed for navigation of foreign ships and Danish ships, except by special permission of the royal Danish government, by whom the monopoly of trade with Greenland is held.

2. Pursuant to the laws in force, any ship navigating without permission on the west coast of Greenland may be seized, wherever met with, and the ship and goods be confiscated. Similar punishment may be applied if any person or persons be found trading with the Greenlanders or Danish colonists from a ship lying in a port of Greenland or off the coast.

3. Shipmasters compelled by shipwreck or other causes to seek port in Greenland shall not remain in port longer than necessary. Shipmasters shall also be responsible for their crews not remaining on shore without necessity or in any way trading with the natives, with whom all intercourse is altogether prohibited.

4. The object of prohibiting the navigation of the west coast of Greenland and of maintaining the monopoly of trade is to protect the native population of Greenland. This population will be threatened with ruin if conta-

gious diseases be brought into the country, or if spirituous liquors or other similar articles be imported. The board will, therefore, be obliged to demand that the order prohibiting the navigation of Greenland in every way be respected, in case the crew of any ship should not strictly abstain from all intercourse with the native population.

COPENHAGEN, May 8th, 1884.

After a short conversation the governor and his assistant returned to the shore.

Viewed from the ship, the settlement was seen to be smaller and not so attractive and picturesque as that of Godhavn. Vegetation was even more scanty, and the place had quite a desolate and dreary appearance. It contained two dwelling-houses, one for the governor and the other for the assistant governor; there were also a couple of storehouses, and a stone blubber-house where the fats and oils were rendered and prepared for shipment. These buildings were similar in style to those which we had seen at Godhavn, but smaller and less pretentious. The Danish flag floated from a flagstaff placed in front of the governor's house.

The native huts, about twenty-five in number, were smaller and more dilapidated than those of the lower settlement. They are situated at the foot of a mountain, the water from the melting snow and ice of which trickled down through the village, making everything wet and muddy. We did not push our investigations very far into these hovels. The natives, numbering about a hundred, are a miserable, poverty-stricken looking set of

mortals. They had nothing to trade nor to sell but a few birds' eggs. We bought some of these, and found them good eating; they were the eggs of the wild ducks that frequented the neighborhood.

We were told that a whale-ship had called there a few weeks before our arrival, and the natives had then sold all that they had to dispose of. It was fortunate for us that we had obtained our supply of fur clothing at Godhavn, as otherwise we would have been unable to have gotten any. We went ashore, but only stayed a couple of hours, as the place possessed little of interest and the weather was disagreeable.

A dozen or more natives came out to the ship in their kajaks. These native boats are made of seal-skins sewn together and tightly stretched over a light framework of wood and bone, the seams being sewn so carefully as to be water-tight. They are about sixteen feet long, less than fifty pounds in weight, and just wide enough to accommodate a single person, who sits in the centre, on the bottom of the boat. They are sharp at the extremities, which curve slightly upward, and are decked over with skins, except a small opening in the centre, in



KAJAK AND PADDLE.

which the occupant sits. This opening is so small that it requires some force and skill on the part of the kajaker

to place himself in position without capsizing; so that in attempting to get in they usually steady the boat with a paddle put in the water over the side. After being seated an apron made of skin is drawn around them and tied fast under the arms, thus preventing any water from entering the boat. If, however, it should capsize, they are unable to get loose, and are often drowned. They use a double-bladed paddle made of wood, and propel their boats with great velocity in all conditions of sea and weather.

Fastened to the boat by means of leather thongs are the harpoon and spears which they use in hunting.



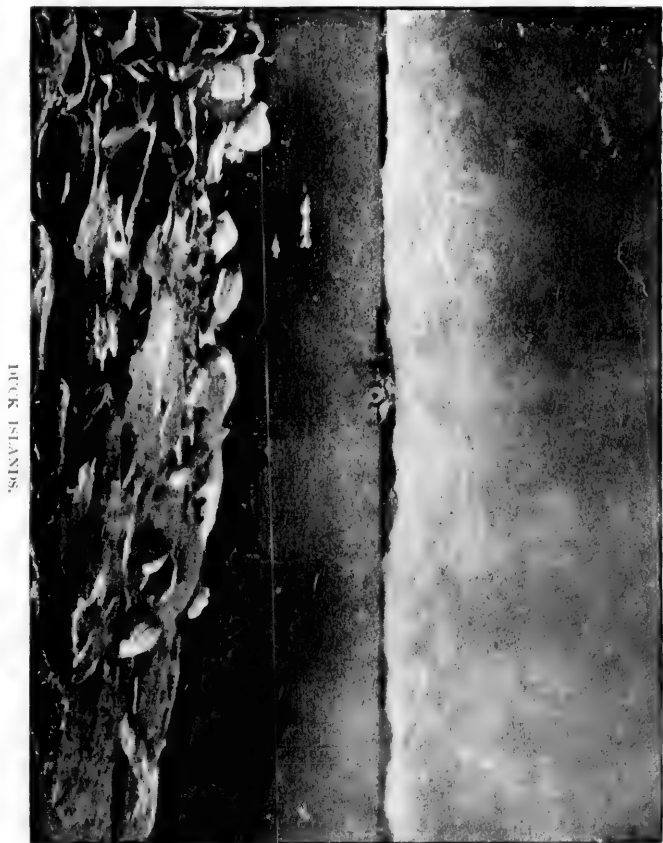
A KAJAKER, UTERNAVIK.

While wandering through the village our attention was attracted by a native who was evidently ill. On inquiry we found that he was suffering from an old injury

to the right shoulder. Examining him more closely, an opening was seen extending downward two or three inches from the point of the shoulder. In the cavity thus exposed bare dead bone was visible; this was detached with the finger and removed, and proved to be the remains of the head of the arm-bone. He had evidently been without treatment, and must have been suffering for months. When we saw him the wound had received no attention whatever, and was only protected by the fur coat which he wore. The dead bone having been removed, the wound would start at once to heal, and probably in a short time was entirely closed, though the use of his arm would be impaired.

The weather being thick and foggy, the ship was detained until 12 o'clock, when we got to sea and bade good-bye to Upernavik. The governor and his assistant were the last white men we encountered on the northward trip. Upernavik is in latitude $72^{\circ} 40'$, and is the last Danish settlement, with the exception of a still smaller one called Tussiacic, situated twenty or twenty-five miles further north. We d' l not stop there, because it was difficult of access and insignificant, and would only have detained us unnecessarily. We understood that the settlement was almost abandoned, no white men living there. Beyond this latitude Denmark has no jurisdiction nor representatives. In the afternoon the weather cleared up, many icebergs coming again into sight. We saw a native in his kajak, about three miles from the ship, in the vicinity of several small islands. He was miles away from any known settlement, and we

did not envy him his lonely life. On observing him through the marine glass he appeared to be coming

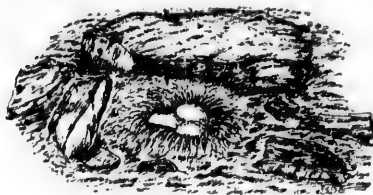


DUCK ISLANDS.

toward us, but, seeing that we kept on our way, finally turned about and paddled back to his island.

Early the following morning we reached Duck Islands. These were well named, as they teemed with ducks and

all kind of water-fowl. We shot about three hundred of them, and gathered three barrels of eggs in about half an hour. We also filled several large bags with the eider-down with which the nests were lined. These



NEST OF THE EIDER-DUCK.

islands were about two miles in circumference, rather hilly, but not mountainous, and entirely free from ice and snow. The nests were not concealed in crevices in the rocks, but lay exposed on the ground, in many places but a few feet apart. They each contained from three to six large greenish eggs. The ducks themselves were so tame that they would remain on their nests until we were so near as to almost grasp them.

The ship was not anchored at these islands, but steamed slowly around them until the small boats which had taken us ashore had returned. This procedure was necessary in order to avoid a collision with the large icebergs which were continually drifting about us.

CHAPTER VI.

COLLAPSING OF AN ICEBERG.—IN THE MELVILLE BAY PACK.—
FLOES AND PANS.—BUTTING THE ICE.—ARCTIC SPORT.—
LIEUTENANT PEARY BREAKS HIS LEG.

SOON after getting under way we observed the interesting sight of an immense iceberg collapsing and falling into the sea with a noise like the loudest thunder. The reverberations were remarkable, and lasted quite two minutes. Many times before we had heard these thunderings and knew their cause, but this was the first time that we were near enough to see the interesting phenomenon. This large mass of ice falling into the sea caused considerable agitation of the water, and our ship, although at least one mile away, was very perceptibly rocked by the waves so produced.

Toward afternoon a prominent landmark came into view. This was a peculiarly shaped mountain on the Greenland coast, known as the Devil's Thumb. It is 2347 feet in height, and, towering far above the surrounding mountains, looks like a gigantic thumb extending upward from a hand. This marks the entrance to the dreaded Melville Bay. It was not long before we encountered a heavy floe of ice, and made but little progress. After a few hours' steaming we found what appeared to be a lead or opening in the ice, which was

immediately followed, but the water space soon became more and more contracted and we gradually lost headway. In one hour the ice had not only closed in front of us, but astern also, and advance and retreat were alike impossible. So much coal was used in our search for a way out that the captain gave up the attempt for the time being. We had only worked our way about five miles through the floe when we found our passage thus blocked. To our right the Devil's Thumb was visible, although quite fifty miles away. In front of us and to our left the ice stretched as far as the eye could reach. Even from the mast-head no water was to be seen but that to the south by which we had approached. The ice was quite level, except in places where some of the "pans" had been jammed up above the surface or where large icebergs were imprisoned in the mass.

There was about a foot of snow on the ice, and in this were seen the tracks of the polar bear; for Melville Bay is known to be a favorite place of resort for these animals. It is their habit to wander over the large ice-floes in search of seals, and this bay, so commonly full of floating ice, forms a good hunting-ground for them. These, the first bear-tracks that we had seen, caused us all to prepare our guns in anticipation of a sight of this much-wished-for game; but although we kept a sharp lookout for many hours, our vigil was unrewarded, as we failed to see a single one. Several photographs were taken of this dreary scene at midnight. The following day the ice loosened somewhat and we were able to advance a few miles, but at 5 P. M. we were again stuck

hard and fast. After several attempts we gave up all hope of making any progress that night. The ice was very heavy, being six to eight feet thick, and movement



A MIDNIGHT SCENE.

in any direction was impossible, as heavy cakes or fields of ice surrounded us on all sides, some of these being many acres in extent. Our hope was that on the morrow a change of wind or tide would free us and permit our onward progress.

We were now fairly in the Melville Bay pack. This bay is never free from ice, and is always a dangerous and difficult place to traverse. At midnight, the Fourth of

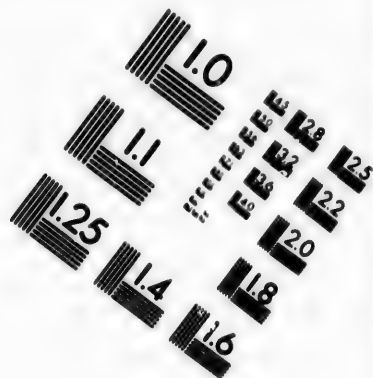
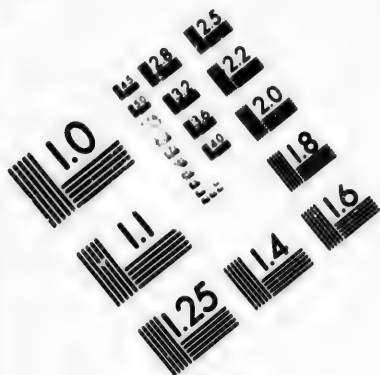
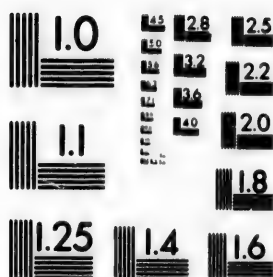


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July was ushered in by firing the ship's cannon and a volley of musketry. We then ran up the American flags at the fore- and mizzen-masts, dipped the ensign, and gave three hearty cheers. While here imprisoned some photographs of our ship in holiday attire were taken, and two seals were shot and added to our larder. At noon the ice seemed to loosen somewhat, and by backing the ship a couple of lengths and going ahead at full speed we were able to force our way through enough of the obstructing ice to gain some open water.

This butting and pounding of the ice cost us over two tons of coal to move only fifty feet, which was a very serious matter to us should the necessity for it often arise, as we were far from any supply of coal and would need all we carried to enable us to get back to St. John's. We were making two or three knots an hour, which was very encouraging headway through such heavy ice.

At last the lookout man from the mast-head imparted to us the cheerful intelligence of more open water ahead. From the topmast a fine view for many miles around could be had, this elevated position not being so exposed and disagreeable as one would imagine.

In common with other Arctic whalers, our ship was provided with what is known as a "crow's nest." This consists of a large barrel bolted securely to the top of the foremast. It is provided with a seat and lined with furs. Surrounding the top of the barrel and extending about a foot from its edge is a light iron railing on which the lookout rests the telescope. The entrance is through a trap-door in the bottom, which is closed after getting

inside, and thus forms a floor to this lofty perch. Access to the crow's nest is obtained by means of a swinging ladder leading from the cross-trees to the bottom of the cask.

After working all night we came to a full stop at 8 A. M., and then made no progress for some time except with the drift of the ice, which seemed to be moving northward. Snow and rain fell alternately through the day, and kept us below deck. Some of the men went on the ice to look for seals, but returned in a few hours with no larger game than an ivory gull (*Gavia Alba*), a bird never met with south of Greenland. This was the first one we had seen, and a beautiful bird it was, having the color and gloss of pure ivory. We were no longer in sight of land; whether this was due to having drifted too far to the westward or to the thickness of the atmosphere it was impossible to determine, and we were compelled to await the appearance of the sun or a clearing up of the weather. The snow continued to fall until six o'clock the next morning, and, although not heavy enough to remain long on the deck, was sufficient to increase the whiteness of the surrounding ice. The day being dull and misty, the glare was not so trying on the eyes as if the sun had been shining.

The prospect of our leaving the ice was as bad as the weather. No attempt was made to move the ship, as from the crow's nest no water could be seen. The weather being so thick, it would have been impossible to see the land even if it were no further distant than when we first entered the pack. We had undoubtedly drifted

many miles with the ice, but in what direction we knew not. Anxious as we all were to get northward, being fast in the ice had not only become monotonous, but even more serious than we had at first thought. It was necessary to use considerable coal, even if the furnace fires had to be banked and only enough steam kept up to enable us to move as opportunity arose. The next day found the ice still firm and fast about us. Occasional light snow-squalls were experienced, but about noon the sun showed itself long enough to allow us to take an approximate observation, and by using a horizon of ice the latitude was found to be about 75° . We were unable to get the longitude, and so could not determine the distance we were off from the coast of Greenland. No land had been in sight for several days. The following day also was cloudy and dull, with snow-squalls in the afternoon. We were apparently as hard and fast in the ice as ever, with no indications of being able to move for some time. An observation showed that we had drifted three miles in a southerly direction. The temperature averaged 31° Fahrenheit, the lowest being 28° . The weather was cold and cloudy, and the frost about the ship and rigging gave everything a white and phantom-like appearance. The little water that was visible between the cakes of ice and around the ship had become frozen, and made ice a quarter of an inch thick.

Our position was rapidly assuming a more grave aspect, as we had now no immediate hope of being able to get out of the pack. The delay was becoming still more tedious and wearisome. We had nothing to do, and

nothing was to be seen but ice, ice everywhere. Once in a while a seal appeared, but very shy and hard to approach within shooting distance. We managed to get three or four guillemots (*Combia Froile*) each day, which were quite acceptable. They are a species of duck and delicate in flavor, not being so fishy as some of the other birds we had eaten.

As if by magic, early the next morning the ice, which had held us so firmly in its grasp, began to loosen, and Mr. Kenealy, in looking over the side, noticed that the ship was afloat, and called attention to it. The captain immediately ordered steam up, and on starting ahead the ice yielded and we were able to steam for about half an hour, when a heavy fog so enveloped everything that it was useless to proceed, as it was impossible to pick our way through the vast floes which still remained ahead. This sudden and remarkable change in the pack, loosening so quickly after being solid a few minutes before, is not unusual, though difficult to explain. The favorable change made us all more hopeful and cheerful than we had been for some time. The fog continued dense all day, but late during the night it began to lift. We had yet several hundred miles to go before reaching our objective point in the north.

The prospect of success was not encouraging, for we knew that we had many miles of ice yet to pass through, as open water was known to be scarce from here northward. This task would have to be accomplished and a return made to a point further south than Melville Bay to ensure us getting home the same year. The thought

of passing a winter in this lonely clime, with its months of cold and darkness, was far from our wishes. Our food-supply was not sufficient to ensure us enough to eat, and this, with the memory of other unfortunate expeditions, presented such a gloomy picture that we endeavored not to think of it. On the 11th of July land was sighted, but so far away and indistinct that the locality was unrecognized. Although the temperature was 22° Fahrenheit, the ice continued to loosen, and we were able to make about ten or fifteen miles. This was the distance actually steamed, but it was done in winding around and between large fields of ice, and at the finish did not put us far from our starting-place.

At eight o'clock on the evening of that day a distressing accident happened to Lieutenant Peary. He was standing near the rudder-chains, in the stern of the ship, when a large block of ice struck the rudder with great force, throwing the tiller violently to one side and tearing the wheel out of the hands of the helmsman. The right leg of the lieutenant was caught between the rudder-chains and the wheel-house, fracturing both bones at the lower third. This, of course, completely disabled him for the rest of the voyage, and, occurring as it did at a time when all were more or less worried by the unfavorable prospect, exerted a very depressing influence on us. Several of the party thought it better to abandon the attempt for this year, but to this Lieutenant Peary would not listen. He insisted that his leg would be sufficiently strong by the following spring to enable him to execute his original plans, and that his assistants could

undertake and carry out for him the work that he had laid out to do in the autumn and winter.

Under these circumstances there was nothing to do but to proceed. He was carried below, a bed prepared in the cabin, and the injured limb attended to. Most of the following day was spent in pushing and butting through the ice, which was somewhat looser than the day before. The fog still continued, and it was impossible to make much progress. Some open water, about half a mile distant, was seen from the crow's nest, and to reach this was our principal aim. Once there, we could wait for the fog to lift and have a safer and more favorable resting-place for the ship. We desired, above all, to get a sight of land, in order to enable us to lay a course with some precision, as our ship's compass was very sluggish, owing to our proximity to the magnetic pole. We succeeded at last in reaching the open water, and in a few hours the fog lifted, thus enabling us to make considerable progress through the now weakened and broken ice.

During the afternoon we found quite a number of leads and more open water. Unfortunately the weather again became thick, and as it was impossible to see far ahead of the ship, it was found useless to continue our efforts. The water-course, if followed blindly, might lead to more heavy and troublesome ice than any which had yet been encountered, besides taking us far from our destination, as much of our course had been run entirely on dead reckoning. The thermometer was as low as 20° during most of the day, yet it did not feel as cold and

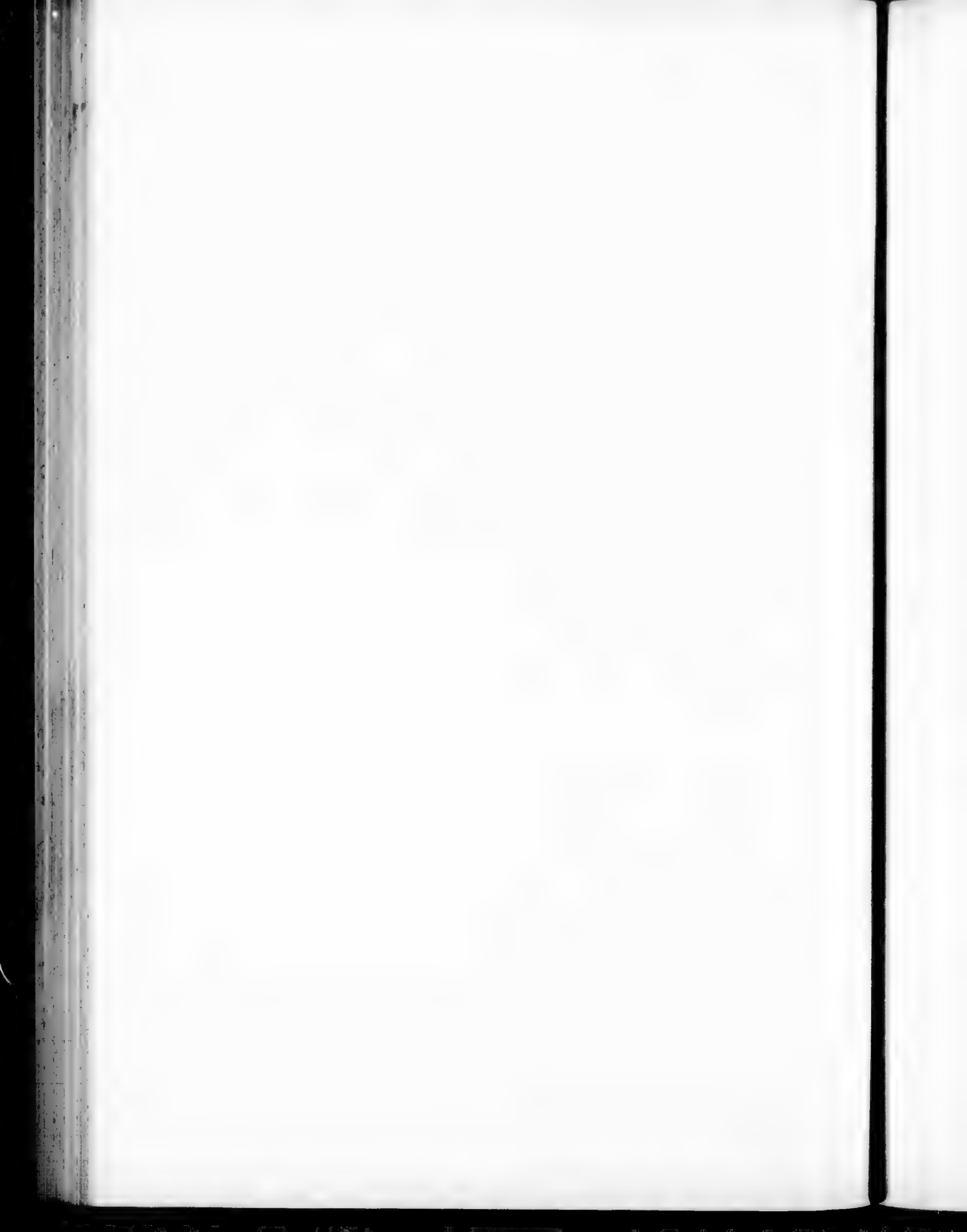
disagreeable as during some previous days with a higher temperature.

Although the thickness of the atmosphere was extreme, the decks and rigging of the ship were comparatively dry. The humidity of the air turned to minute and delicate frost-crystals upon reaching the coldness of the sea-level, covering the ropes with a beautiful and fantastic white coating that gave to the vessel a weird, even ghost-like, appearance. The weather continued bad and the ice was still heavy, the cakes being larger than before. More open water was met with than on any day since entering the immense pack. After butting the ice for an hour or two we were enabled to enter open water and steam for a couple of miles, and then the butting and smashing again began, and lasted till another stretch of water was reached. As the day wore on the weather became clear and fine, and was of great assistance in the navigation of the ship. We were favored, that afternoon, with the first sight of land we had had for over three days—to us a most agreeable change. It was too far away for us to be able to recognize any distinguishing landmarks, but we ran toward it, and expected to make out our exact position the following day.

The "butting" or forcing our way through the heavy ice was a most interesting procedure, although at times somewhat terrifying. A person seeing it for the first time is so impressed that he is not likely ever to forget it. We were compelled to resort to it so often while in the Melville Bay pack that it ceased to be a novelty, and only when it was so violent as to throw one of us to the

THE "KITE" IN MELVILLE BAY.





deck or out of his chair did it cause comment. "Butt-ing," to use the term used by sailors in these seas, consists in forcing the ship against the large floes or pans of ice, either to break them into fragments or to force them to one side.

The "pack," as the whole great field of ice is called, is made up of "floe," some being so large that the eye can hardly see their further extremity, and "pans," which are small, often amounting to little more than ice-blocks. The edges of these ice-fields are of course very irregular, and between them, in the summer-time, are passages or "leads" of water. Often one floe just touches another by a single corner, and beyond, the lead widens out into quite a channel. It then becomes necessary to break off this corner to reach the channel. This is accomplished by backing the ship for several ship's lengths and then steaming at full speed ahead against the projecting corner. The shock, as the prow of the ship strikes the ice, is terrific. Sometimes the corner breaks off and the ship slips easily through into the new channel, while more frequently, so far as the novice can see, no appreciable effect is produced. Then the evolution is repeated again and again until the end is accomplished or the captain sees that further efforts are useless.

It need scarcely be said that the work requires the greatest skill, knowledge, and caution. If the corner is broken, it may cause the ice-fields to revolve toward each other, the channel to close, and put the ship in great danger of being nipped and crushed by the heavy

floes. All possible circumstances must be taken into consideration by the ice-pilot, and it gave us a feeling of confidence to see these hardy Newfoundland sailors attack the ice with such perfect assurance and calmness.

At times, even when the floes are quite thick, the ice is broken without difficulty, while on the other hand the ship is often brought to a standstill by mere tongues or slight projections which seem to defy the force of steam. In the latter case one always has to act with great caution, since it shows that heavy pressure is keeping the ice firm and solid. When such a tongue is broken the floes are apt to come together at some other point, not, as we had imagined, with suddenness and force, but with a scarcely perceptible movement. They seemed to revolve upon their centres on the release of the point of impact, slowly but surely approaching each other until they again touched, and, crushing their edges, came to a complete stop when the resistance of the great floes checked the force of the currents which moved them. Of course a vessel caught in such a closing channel has scarcely a chance of escape. If the ice catches her amidships, the sides are crushed as if made of cardboard, while if, by some fortunate accident, she rises on the floe, she must remain imprisoned until another change breaks up the ice-field and again allows her to float, should the rough treatment received not have made her totally unseaworthy.

This is the cause of most of the accidents which occasion the loss of vessels in the Arctic regions. It was in

this manner that the *Protens* was wrecked when within a few yards of open water. Our captain told us that those on the vessel, being unfamiliar with the ice, refused to believe in the danger, insisting that the ship could accomplish the slight remaining distance, and would not believe, until the ice actually came through the ship's side, that the vessel was in such imminent peril. Only a few hours after the accident the floes again separated in the same slow, majestic manner in which they had come together, but the *Protens* sank instantly to the depths of the ocean, and what would have proved her homeward path, without difficulty or danger, was traversed in the whale-boats by which the retreat to safety was made.

In the midst of the great ice-packs there are frequently "lakes" or spaces of open water, through which the ship can pass until another icy wall stops its progress; then a new "lead" must be looked for, and the butting recommenced.

So the days slipped by, sometimes finding good leads, while others were completely blocked by the masses of ice in front. We tried always to make some progress, and generally succeeded in finding a safe anchorage for the vessel when it was found impossible to proceed farther. The ship in these waters is not anchored to the bottom (for this, we found by sounding, was from six to nine hundred fathoms deep), but to the floes themselves, and for this purpose it was provided with claws or great hooks of iron. When progress was barred the sailors ran out upon the ice, and, cutting a hole in the floe, sank

the hook deeply in the solid ice, thus preventing the ship from drifting from the favorable position which had been selected until some movement of the pack opened up a fresh lead.

CHAPTER VII.

AN ACCIDENT TO THE SHIP.—NIPPED IN THE ICE.—BLASTING.—WE KILL A BEAR.—TABLE ICEBERGS.—CAPE YORK SIGHTED.—DRIFTING WITH THE PACK.

OUR progress was of course exceedingly slow. On July 15th the weather cleared a little and land was seen in the distance. Observations showed that we were in latitude $75^{\circ} 1'$ north, and that, consequently, in eleven days of constant struggle we had advanced only fifty miles. Nevertheless, patches of open water were more frequently met with than before, and this was accounted by the experienced sailors as a most encouraging sign of our release from what had grown to be an almost intolerable imprisonment. The weather was bright and pleasant enough to allow one to go upon deck or on the ice without suffering in the least from the cold. In these high latitudes the heating effect of the sun's rays is like that felt on a mountain-top, and even though the thermometer was constantly below the freezing-point our heavy clothing often felt oppressive.

In the afternoon, while steaming along through comparatively loose ice, the rudder was struck by a heavy ice-cake and a link of the rudder-chain snapped. This was an unfortunate accident, for it involved a delay of three hours for repairs, and by the time they were com-

pleted our favorable lead had closed and we were again brought to a complete stop. An examination of the fragments of the chain showed that its breaking was due to the fact that the iron had been crystallized by the repeated shocks and blows to which the metal had been subjected.

The lead opened on the following morning, and the operation of butting and forcing the ice was again resorted to. We made fair progress, though the weather was thick and misty until about 4 P. M., when we found ourselves in a small lake. While the opposing wall was being diligently searched for a lead it was noticed by the captain that the floes constituting the sides of the lake were gradually coming together, and we found ourselves confronted with the possibility of a "nip," that worst of all Arctic accidents. A lake was opening just ahead of the ship, and to it the captain determined to try and work his way. A narrow lead passed from one lake to the other, and into this channel the ship was forced. We had almost passed through, but a single angle of the ice barring our passage and the bowsprit overhanging the place we desired to reach, when we suddenly found that our progress was completely stopped. The ship refused to go either ahead or astern, and it was evident that it was caught between the edges of the floes which constituted the borders of the lead. We were nipped in the ice.

Captain Pike and his crew realized, of course, the peril in which we were, but, like true sailors, gave no evidence of it, nor did any of us know of the danger until it was safely passed. The sailors, followed by many of

the party, at once jumped on the ice and attempted to open a passage with crowbars and wooden beams. It was found, however, too thick to render this feasible, and we were initiated into another Arctic device: holes were drilled in the ice, and a bottle filled with gunpowder, attached to which was a fuse that had the power of burning under water, was tied to the end of an oar; the fuse being ignited, the oar, with the bottle attached, was shoved through the opening and down under the edge of the ice, where it exploded. The first attempt failed on account of the imperfect sealing of the bottle, and the second failed for the same reason; a third bottle exploded, but without effect on the ice. Two more were simultaneously exploded, and a great cake was blown from the edge. The ship was at once put astern, and in a few minutes it was in comparative safety in a corner of what had been the large lake we had left.

So little did we realize the danger of our situation that those of us who were not assisting the crew spent the time in gambolling on the ice with the dogs or in photographing the ship and the men endeavoring to release her. The next day the captain pointed out the location that the ship had occupied. It was piled up with irregular blocks of ice from thirteen to twenty feet above the surface of the floes, showing the terrific force with which these had come together; yet so slow and majestic is their movement that it is only after such an object lesson as this that one can realize the force behind them.

This was destined to be an eventful day. The ves-

sel, soon after, having been made fast to the ice (a safe harbor for it having been found), some of the party started out upon the floes to shoot the guillemots which



Keely.

Burk.

Kenealy.

Gibson.

IN ARCTIC ATTIRE.

were everywhere plentiful, while the rest retired to the seclusion of the cabin, not relishing the damp, cold air, and amused themselves by reading and chatting. It was about 10 o'clock at night when one of the sailors opened the door of the cabin and, in a voice of suppressed excitement, uttered the single word, "Bear." In an instant all was confusion, for we were all anxious to view the greatest game of the Arctic region. Each one made a jump for his rifle and then rushed for the door. On reaching the deck we looked out upon the ice and saw the bear. He was about three hundred yards off, and the excitement his presence occasioned was increased

when it was discovered that he was leisurely but surely approaching the ship with his peculiar lumbering gait. He would stop every few yards, hold up his head, then swing it slowly from side to side, and again approach. By the captain's direction we crouched behind the bulwarks of the ship and rested our rifle-barrels on the rail. It is the habit of the polar bear to approach any strange object he may see until he comes near enough to scent it. His eyes are quite small and his vision poor, and he frequently approaches vessels which are out of his range of scent.

It was fortunate that the wind was blowing strongly from the direction in which he was coming, and he was unable to discover, by his keen sense of smell, what or who we were, or to realize the danger he was incurring.

While he was slowly approaching the captain went below to invite Mrs. Peary and the rest who were in that part of the ship to come and see the great animal. By the time they reached the deck he was much nearer than when first discovered, and still continued his approach, though stopping more frequently to regard the ship, and then alternately walking and loping in a playful manner, evidently determined to investigate the curious monster. His most interesting performance was cut short, when he was but fifty yards from the ship, by the sound of a shot fired at some birds by the party out on the floe, who, being in the opposite direction, had of course no idea of the situation. Instantly the bear stopped and reared upon his haunches. This was too much for one enthusiastic watcher, and, against the

accepted order that we should all fire together when the signal was given by the captain, he shot at the bear. The report of his rifle was hardly heard when a volley was fired and the bear staggered and fell. We supposed, of course, that he was dead, and jumped from the side of the vessel to reach and examine him. The great white bear is not, however, so easily killed, and before we could get to him he was on his feet once more and made a staggering rush for the water. His shoulder was apparently broken, and he fell frequently, but still stumbled on, while those on the ice who had taken their rifles with them fired shot after shot in vain. The excitement before the volley was fired was very great, but now it was at fever pitch, for we knew from what we had heard that if he reached the open water he was safe.

The Arctic sailors call these beasts the water-bear, because they can swim with greater speed than a boat can be propelled by oars. If the bear was not dangerously hurt, therefore, he would escape, and if, as we found afterward to be the case, he was mortally wounded, his body would sink, and thus again we would lose him. The shooting was consequently of the wildest description, and probably very few of the bullets reached the target. Staggering, falling, and leaving a broad trail of blood on the snow-covered ice, he ran for the lead, some two hundred yards off, and had almost reached the edge of the floe when a well-directed bullet struck him in the base of the skull and he succumbed: the prey was ours.

Many willing hands manned the boat, which was at once launched, a line was put about the bear's neck, and



THE DEAD POLAR BEAR.

he was towed in triumph to the side of the ship. Here, lying at full length on the ice, he was photographed and measured. He proved to be a full-grown male. In his body were numerous bullet-holes, showing that almost all the bullets of the original volley had struck him. One had pierced his heart, while another had broken the shoulder. To have been so active, and to have shown the vitality which he did after receiving such serious wounds, shows the remarkable endurance of these animals. He was accounted by the sailors to be a large specimen, and measured seven feet one inch in length, and stood three feet four inches high at the shoulders. The sole of his foot was fourteen and one-half inches in length, and he weighed between six and seven hundred pounds. The fur was very thick, long, and of a yellowish-white color, in marked contrast to the pure whiteness of the snow. His claws and teeth were very large, and his skull so thick as to be almost invulnerable.

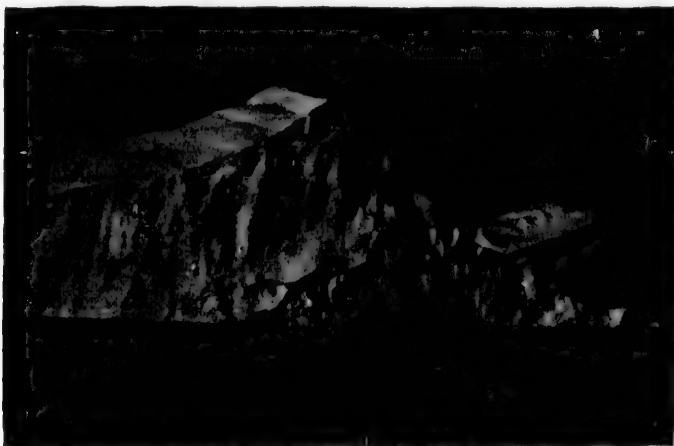
As Lieutenant Peary desired the meat for provisioning his camp, the hide was removed and the rest of the carcass cut into quarters, as is commonly done with beef. Most unfortunately, the two hind quarters were lost while being washed preparatory to hanging them in the foretop for preservation. A careless sailor had fastened them to a line with a loose knot, and, slipping from this, they sank. The rest was safely stored away, to be added to the larder of the little encampment at Whale Sound.

Thereafter a careful watch was kept for these great animals, but, although tracks were plentiful, we were

not rewarded with the sight of any more until two days later, when a she bear and her two cubs were seen at a considerable distance from the ship, their yellowish fur making them clearly distinguishable against the icy background. The vessel was headed in their direction, and, as in the case of the former bear, they evinced no fear of the strange object. Unfortunately, we were compelled to go to windward, and as soon as the scent reached them they commenced to retreat. The mother bear could run like a race-horse, but she stopped every once in a while to urge her cubs to greater speed. Being out of range of our rifles, a chase was organized. The party on the ice presented a rather ludicrous picture running and stumbling over its rough and hummocky surface, while the bears progressed without the slightest difficulty and at a far greater rate of speed. The chase was soon abandoned and the party recalled, the ship itself being started in pursuit; but the lead was filled with blocks of ice which retarded our progress, and the bears were so thoroughly frightened that they disappeared without a single shot being fired, and we saw them no more.

After the excitement of the killing of the bear had subsided the monotony of the voyage was again resumed. On the next afternoon snow fell in large quantities—larger, in fact, than at any time since we had started north—and the day looked like a midwinter one at home. We steamed ahead at the rate of four knots an hour for twenty-four hours, the water being now comparatively open. Much drift ice and enormous table icebergs were passed, but by careful steering we avoided all collisions.

It is difficult to estimate the size of the great bergs set free from the glaciers of the far North. The guesses of the novices were apparently as accurate as those of the experienced sailors. All, however, agreed that those we saw that day surpassed in size any seen before. One was thought by the officers of the *Kite* to be more than six miles in length, and stretched its vertical walls fully



A GREAT NORTHERN ICEBERG.

three hundred feet above the water. The crow's nest on our mast-head was seventy feet above the deck, and at this height it was apparent that the top surface of the great table of ice was still far above it. The bergs met with in this locality were quite different from those previously encountered. They were no longer rugged in outline, with pinnacles and varied shapes, but, rather, huge blocks of ice, nearly square and of immense size. They had evidently been recently released from the

great glaciers of the North, and the water and air had not yet had a chance to carve them into the curious spires, caverns, and towers which had characterized the icebergs seen floating from the glaciers further south.

The drift of the water in these seas, so far as could be made out, was northward along the west coast of Greenland as far as Melville Bay. Here the stream is deflected to the west by the southerly flow of the Arctic current and the projection of Cape York, and, sweeping down the east coast of North America, emerges finally in the open ocean south of Newfoundland. Occasionally this icy current flows down our Atlantic coast, and bathers are then made to suffer from the lowered temperature of the water.

On July 18th we caught a glimpse of Cape York, but the weather was cloudy and foggy, and we could not be sure of our exact position. The next day found the weather still dark and gloomy. A bitterly cold wind from the south-west was blowing, and the black, threatening sky gave the scene an appearance of midwinter. An occasional snow-squall added even more to the dreary outlook, and gave us a faint idea of the misery and hardships to be encountered in regions farther north.

No attempt was made to move the ship. We supposed that we were still somewhere in the neighborhood of Cape York, but as the day was dark and our compass so uncertain, and we had had such an imperfect sight of land, we did not know in which direction to proceed. The ice was troublesome—so much so that we were enabled to make but a few miles in the direction in which

we inferred the land to be. The icebergs were very numerous, and still larger and higher than any we had yet encountered. On July 20th, at 4 P. M., the fog rolled away sufficiently to allow land to be seen to our right, and Cape York, latitude $76^{\circ} 2'$, longitude $68^{\circ} 4'$, distant only seven miles, was in plain view. The chronometer was found to be correct, and the prospects of our voyage looked more encouraging. We had intended landing on the cape to undertake some explorations, but ice was again more abundant, and it was found impossible to reach the shore; indeed, so heavy and treacherous was it that even if we had succeeded in gaining the land our return to the ship might have been made impossible by the breaking up of the floe.

Mr. Dumphy, the second mate, having gone a short distance away from the ship on the ice, was surprised to find a small piece of board about a couple of feet long. Many were the speculations and conjectures indulged in as to its mode of getting there. We could think of no more plausible explanation than that it had been thrown overboard from some whaler which, possibly, might have preceded us earlier in the season. Small though the incident was, it served to break the monotony of our stay in the ice, and gave, for the time being, a new direction to our thoughts.

This day was bright, warm, and sunny, the best we had enjoyed for two weeks, and a most agreeable change. To the north the ice was as heavy and impassable as that which was between us and the shore.

Our anxiety was increasing daily. We were desirous

of reaching our destination as soon as possible, for the summer was passing rapidly, and it would soon be necessary to commence our return. Delay would increase the danger of our being caught in the ice, and perhaps compel us to remain all winter. The following day was also bright and clear, and the land near enough to allow us to get a good idea of the country. Several large glaciers were plainly visible, and the snow-covered mountains were grand and imposing. The ice continued to bar our way, and to the northward was one solid pack whose limit could not be made out from the mast-head. It was the most formidable ice we had yet encountered, and we feared it might prevent further progress.

We waited here four days, hoping all the while for the ice to break and permit our passage. To the south we still had a good chance to escape should we deem it advisable to beat a retreat and renounce all hope of reaching Whale Sound, which was still one hundred and sixty miles to the northward. Matters now assumed a rather gloomy look. It was impossible to land Lieutenant Peary on the shore at this point, even had he desired it; and, could we have done so, it would have been necessary for our small party to drag all the stores, supplies, and materials for his house, on improvised sledges, over the rough and treacherous ice a distance of ten miles. At any time the ice-pack might have broken up and drifted far away, leaving perhaps part of the lieutenant's effects on the land and the rest on the ship, which, caught by the drifting ice, would have been unable to return and land the remainder. Any plan which involved the pos-

sibility of such a separation of the party and stores would imperil the success of the enterprise, besides leaving the expedition a hundred and sixty miles farther south than had been anticipated, and was not to be thought of.

Lieutenant Peary was still confined to the cabin with his broken leg. He was very patient and hopeful throughout this trying ordeal, and, notwithstanding having all the responsibility of the expedition resting upon him, remained cheerful and sanguine of success. This served greatly to cheer us at a time when we most needed encouragement. On the afternoon of the fourth day a strong wind from the east came up, and was regarded as a favorable sign by our captain, who said that if it continued for a couple of days it would separate the ice and leave us a channel by which we might be able to work our way onward. The pack seemed to be drifting northward, taking us along with it. This appeared to be due to a surface current, as the icebergs drifting south showed the existence of a deeper current tending in that direction.

There was no lack of sport. Thousands of birds were to be seen in every direction, and in such flock, that many could be brought down by a single discharge. There were several varieties, but the dovkie or little auk were most numerous, and were brought to the ship by the hunters in considerable numbers. Hardly a day went by without a seal or two being obtained, and, with the meat of the bear lately killed, our table was plentifully supplied with fresh meat.

CHAPTER VIII.

FREE ONCE MORE.—CAPE PARRY AND WHALE SOUND.—AN
ESKIMO VILLAGE.—THE NATIVES.—CONTRAST WITH THE
FUEGIANS.—RELICS FROM ESKIMO GRAVES.

ON the 23d of July, at 6 o'clock in the morning, an unlooked-for breaking up and drifting of the ice-pack occurred. The ice began to show signs of separating, and within an hour or two a channel large enough for the ship to sail in was ready for us. Steam was immediately raised and a new start made for our destination. As we proceeded the open spaces became more abundant, and in a couple of hours we were in water free from packs and floes. Icebergs were still numerous, but so large and far apart that we had no difficulty in avoiding them. After getting out of the ice the run from Saunders Island, where our release occurred, to Cape Parry, which marks the entrance to Whale Sound, was made during the day. Cape Parry was reached at about 10 o'clock P. M., after a day of most charming weather and a stiff breeze which caused just enough swell on the water to give the ship a pleasant motion and to impart to us a feeling of freedom after being so long held in the ice-pack. Land was in sight all the way up; it was high and barren, and we noticed that much less snow was present here than further south. Altogether, the locality

was more attractive than the parts of Greenland seen before.

Cape Parry marks the entrance to Whale Sound, which is a wide channel between the coast of Greenland and Northumberland and Herbert Islands, and serves as one of the entrances into Inglefield Gulf. The latter is a large body of water separated from Baffin Bay or Smith Sound by three large islands, Northumberland, Herbert, and Hakluyt. It was on the northern side of Inglefield Gulf that Lieutenant Peary desired to land, but, finding Whale Sound open, we skirted along the shores of Cape Parry, seeking to gain an entrance to the gulf. Cape Parry is marked by a huge and almost perpendicular cliff of red sandstone and basalt, crowned, as usual in Greenland, with a perpetual ice cap, and broken here and there by small glaciers and deep fiords. As we coasted along in the full sunlight the cliffs presented a most picturesque and beautiful appearance. At times we would see in a valley a torrent, formed from the melting snow and ice above, come dashing over the mountain, forming beautiful cascades in its descent. After entering the sound the ship was put under an easy head of steam and we slowly cruised along the southern shore. The principal object was to find an Eskimo village which was known to be situated thereabouts. We had already found our charts of these waters so faulty and incomplete that, outside of prominent capes and landmarks, we placed little reliance on them; consequently the navigation of the inland waters was necessarily slow and dangerous.

After steaming along the land for some miles we discovered what appeared to be three or four skin tents. The marine glass showed natives and dogs and other signs of life. We approached to within about a mile of the village, but hesitated to go nearer, as everywhere were seen large boulders and masses of rock that had fallen into the water from the heights above. The tents were seen to be located on a comparatively level plateau, near the entrance to a fiord, whose shores were lined with glaciers. Captain Pike feared to enter the fiord itself, but kept the *Kite* near its mouth while the village was visited by the party. The whale-boat being lowered, we soon arrived at what appeared to be the most available landing-place. This consisted of a rocky slope of nearly 45° , and, as we found later, was the place where the natives hauled up the carcasses of walrus, seal, and other animals killed in the chase. It was by far the most desirable landing-place we could have selected. The tents were situated on a bluff at some distance from the water, and were almost impossible to approach except from the spot at which we had landed. The natives were there ready to meet us, and seemed delighted at our arrival.

The village, if such it could be called, was composed of only three rude skin tents supported on narwhal-horns, and evidently was only the summer home of the little tribe, as a number of more permanent structures, composed of earth and stones, were seen near by. While we found only three tents, these stone huts numbered above a dozen, indicating that the settlement was much larger

during the winter months. The small number of the natives was probably due to the absence of many on their summer hunting trips. The entire population, at the



THE NATIVE CAMP AT WHALE SOUND.

time of our visit, numbered twelve—four men, three women, and five children. These were the first of the so-called "Arctic highlanders" of Captain Ross that we had seen, and interested us greatly. The children, as was the case elsewhere in Greenland, were pretty and healthy looking, but the adults were filthy and anything but attractive. I was among the first ashore, and, extending my hand to the Eskimo who appeared to be the chief, and offering him a piece of tobacco, was somewhat surprised to see that my courtesy was not understood. He seemed delighted to see us, but had no knowledge of our custom of shaking hands as a mode of salutation. The tobacco which I gave him he handled in a way which

showed to me at once that he was unfamiliar with the article. One of the sailors, who, at the time, happened to be smoking a pipe, was regarded by them with the greatest wonder, and they were evidently puzzled to account for the smoke which came from the man's mouth. We had found Eskimos who rarely, if ever, saw white men. Their location, of course, would have rendered impossible any visitation of whale-ships, which seldom get so far north as this latitude. Even if they did, they would not be likely to venture into such unknown waters unless on a mission similar to ours. This first impression was confirmed by a visit to their tents and houses. With the exception of a few iron tips to their harpoons, a small piece of sheet lead, the iron end of a boat-hook, and a sewing-thimble, which a woman produced in great triumph, nothing was seen which showed con-



KNIFE WITH IVORY BLADE AND WOODEN HANDLE.



IVORY PIN, TWO-THIRDS ACTUAL SIZE.

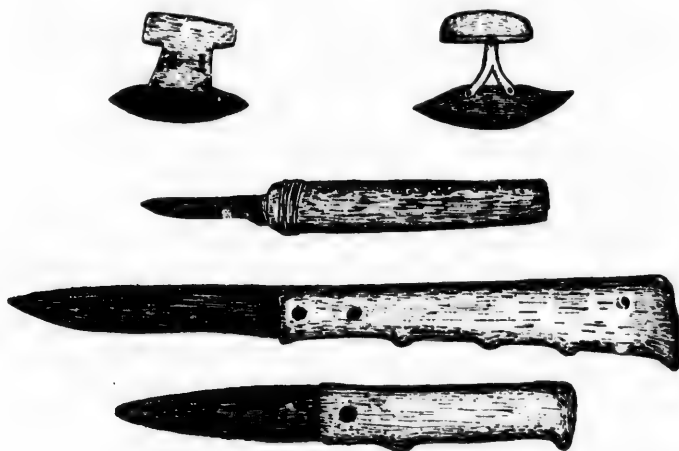
tact with their civilized brethren. It is possible that the few natives in this out-of-the-way place obtained these bits of civilization through some of their more fortunate kinsmen meeting whalers or Polar expeditions during their summer hunts, as they are known to journey, on

such trips, far from their winter quarters. They manifested unusual delight when shown needles, knives, etc., and for a few of these articles we were enabled to get all the curiosities desired. A knife bought a reindeer-skin, and for a needle we received an ivory walrus-tusk. A curious piece of steel used in skinning seals, brought from Godhavn, was exchanged for two large narwhal-horns.

Many and varied were the curios gotten by our party, and I am glad to say that, although the rate of exchange was so much in our favor, we left them with a supply of material that was of far more service to them than the things they parted with. A skin house, with its interior fittings complete, and a large sledge most ingeniously made of driftwood, bone, and ivory, were obtained in exchange for a hatchet, a saw, and two files. Two or three boards and an empty flour-barrel pleased them beyond description, as it provided them with enough wood to make their harpoons, paddles, and sledges without the months of labor which had evidently been expended in binding together the numerous fragments of wood and bone of which their sledges and other implements were constructed.

During our stay we had an excellent opportunity of observing their mode of life. Their food consisted of the flesh and blubber of the walrus, narwhal, and seal, and we saw lying in the neighborhood of their tents, on the bare ground, the partially-consumed carcasses of several of these animals, the walrus predominating. The flesh was neither frozen nor decomposed, and appeared to have been recently obtained. At irregular intervals, according

as their hunger moved them, they would cut from a carcass, with an old knife, a long strip of flesh or blubber so large that it would barely go into their mouths. This strip was held in the teeth, while, with a sawing move-



ESKIMO KNIVES.

ment, a morsel was cut off so close to the mouth that their noses appeared to be in imminent peril. Thus, without cooking or other preparation, they ate the dirty mass of fat and flesh, apparently with great relish. We saw no cooked food of any description, nor any sign of the use of vegetable food. So far as we could determine, they are entirely carnivorous, the fat and oil of the blubber taking the place of the vegetable food demanded by our systems. The teeth of the Eskimos, as far as we observed, showed no evidence of decay, and, instead of losing them by disease, they are generally retained until

death, as was shown by the skulls which were brought back. As a rule, they were very much worn away, it being quite common to see the entire crown of the tooth gone and the dentine exposed, surrounded by a narrow rim of enamel. This wearing away is probably due to the chewing of the tough animal tissues on which the natives subsist, the residue of which, after having been deprived of all nutriment, is spit out. The custom they have of chewing the garments in order to make them more pliable also aids in accounting for this condition.

The interior of the tents was furnished only with a heap of skins and rubbish on which the occupants slept. In one of them a lamp was found burning. It was made of a slightly hollowed slab of soapstone or something similar, and was filled



LAMP MADE OF SOAPSTONE.

with fat squeezed from blubber. In it was a wick made of twisted moss; this, though burning with a rather dull and sickly flame, seemed to be the only means they had of getting heat and light. They obtained their fire, apparently, by the use of flint, and tinder made from dried moss. The surroundings of the village were filthy in the extreme. Bones of animals and birds and half-decomposed fragments of animal refuse lay around in every direction. Two leashes of Eskimo dogs, securely tied near the tents, regarded the strangers with distrust.

The natives themselves were as friendly as possible, evincing their pleasure at seeing us in gestures and cries

and following us everywhere. The children, however appeared frightened, and one or two cried piteously if we approached them. One of the men seemed to be demented or idiotic. He uttered hoarse guttural cries, and would walk around members of the party with a curious step, occasionally shouting with seeming gratification. We noticed that he did not accompany the other men, but was left with the women and children. It was of course impossible to understand them except by motions, but these were readily interpreted. The men were well formed and slightly below the medium height.



AN ARCTIC BELLE.

Their complexions were swarthy, and one or two had small beards or moustaches. The women were short and squatty, with faces broad and good-natured looking in

spite of the small and slanting eyes and wide mouths. The costume worn was the same in both sexes, and consisted of a skin jacket and breeches. Some of the women had double jackets, the inner being made of bird-skins and the outer of seal. In this case the feather side was worn next the skin, the fur being on the outside. All of the people were indescribably filthy, and had evidently never had a bath in their lives. The odors about their tents were nauseating, and their bodies seemed to give off the rank smell of seal oil.

The plateau on which they lived was about a quarter of a mile broad and stretched back to the high cliffs of the mainland. It was covered with flowers and grasses, and moss grew in abundance. Altogether, they had selected a choice spot for their camp, which overlooked both the fiord and the waters of Whale Sound, and seemed to be perfectly contented with their lot.

I was greatly interested in observing the peculiar habits and mode of life of these most northern Eskimos, and in contrasting them with those of the natives of Terra del Fuego. The Fuegians are the savage inhabitants of the island which is situated at the extreme end of South America, being separated from it by the Strait of Magellan. The interior of the country has never been explored, and the only knowledge we have of any inhabitants is of those living on the shores bordering the strait. From this circumstance they are sometimes spoken of as "the dwellers of the straits."

Three years ago, while voyaging from Philadelphia to San Francisco, I passed through the Strait of Magel-

lan, and had an excellent opportunity of observing the natives. The passage through the straits was a tedious and difficult one, consuming nearly a week's time. This was occasioned by the peculiar character of the currents and tide, which often necessitated our lying at anchor for many hours at a time. It was during these periods that the natives came to the ship and we were enabled to visit the shore. The Eskimos, although living in a far more desolate and rigorous region than the dwellers of the straits, and having less opportunity for contact with civilized man, yet exhibit greater intelligence and ability in providing for their wants than do the Fuegians. Why this should be it is impossible even to conjecture. All travellers agree in placing the Fuegians the lowest in the scale of humanity. Inhabiting, as they do, a land in which rain, sleet, and snow are of constant occurrence, and a day of continuous sunshine almost unknown, they are yet too ignorant to clothe themselves, notwithstanding an abundance of fur-bearing animals. They scarcely make any attempt at protecting themselves from a climate that is more trying to the health of humanity than any encountered beyond the Arctic Circle.

The Fuegians that I have seen were absolutely without astonishment at anything that was shown them, and had not the slightest conception of the use, effect, or advantage of fire-arms.

The Eskimos, on the contrary, show considerable skill and intelligence in the construction of their stone huts, weapons, kajaks, sledges, etc., and the taming and control of their dogs are remarkable. They also ap-

peared to express much astonishment and wonder at the sight of Caucasians, and were evidently aware of the superiority of the white man. They exhibited especial delight when shown our fire-arms, many of which were of such a recent and improved mechanism as to have rendered it impossible for them to have ever seen the like before, yet the uses and advantages of which they readily understood and appreciated.

The Eskimos were also excellent mimics both of sound and gesture, and would repeat with accuracy the words and actions of the members of our party. On one occasion Dr. Hughes was wanted, and the natives, about a dozen in number, hearing his name, began mimicing and calling, "Hughes! Hughes! Hughes!" This provoked a laugh, in which they likewise joined, as if also enjoying the joke. Other points of contrast between the Eskimos and Fuegians suggested themselves, but these were the most striking.

A large number of stone-piles in the vicinity of the settlement having attracted our attention, we were informed, by signs, of course, that they contained stores of meat and blubber intended for winter use; others which we saw contained the bodies of departed Eskimos buried as they had died, in full costume.

The ground is continually frozen from a few inches below the surface to the depth of many feet; hence the necessity for this mode of burial. The number of graves observed was much larger than that of the inhabitants of the place.

Being desirous of procuring some skulls and bones to

take home for scientific purposes, we wandered leisurely about these stone-piles, having first managed to have the attention of the natives diverted to another direction by some of our men. Many of the bodies were scarcely hidden, owing to the stones having rolled away, and it looked as though little attention had been paid to these graves since first they were made.

Our search was finally rewarded by the discovery of a body in a partially mummified condition, which had evidently been buried a long time. It was enveloped in a bear-skin garment, parts of which still adhered to the bones. Hastily removing the body from its tomb, we left it lying on the ground beside the pile of stones, for we feared to excite the animosity of the Eskimos by thus despoiling the graves of their ancestors. We found, afterward, that there was not the slightest necessity for our having had any uneasiness on that score, for they themselves cheerfully helped us to discover and carry to the ship skulls and other fragments of mortality. Having successfully avoided their observation, the body was quickly wrapped in an old coat and, thus enveloped, conveyed on board the vessel. Two small models of harpoons and a little sledge were found in the tomb, and it was evident, not less from the care with which the body had been buried than from the size of the bones, that the deceased was a man, and had been, in his time, a person of some importance.

CHAPTER IX.

HERBERT ISLAND.—FOX-TRAPS.—A GREEN SPOT AMONG THE
GLACIERS.—McCORMICK BAY.—CHOOSING A SPOT FOR
PEARY'S CAMP.—BUILDING THE HOUSE.—A CLIMB TO THE
ICE CAP.

OUR investigations finished, we returned to the ship, which was then headed up Whale Sound. Before Herbert Island was passed it was evident that we could not hope to reach Inglefield Gulf by that channel. The ice had never started from the gulf, and stretched in one vast, unbroken sheet as far as the eye could reach. We therefore altered our course and steered along the edge of the ice to Herbert Island, and, skirting its shores, entered the channel between Herbert and Northumberland Islands to reach Murchinson Sound, which also communicates with Inglefield Gulf. Several stops were made to examine the shores of Herbert Island, which seemed to be more green and attractive than the rest of the land. Quite a number of stone huts and "caches" or stone-piles containing blubber, stored by the Eskimos, were seen, but none of the natives themselves. There must be a number here during the winter, as the quantity of blubber, huts, sledges, etc. found was comparatively large.

In exploring the land in the vicinity we ran across

quite a number of fox-traps; these were the first we had seen, and interested us greatly. They were small rectangular boxes built of stones, having only a single entrance. Over this opening is suspended or balanced,



ESKIMO STONE DWELLINGS.

by means of a leather thong, a slab of stone; to the other end of the thong the bait is fastened, and it is so arranged that a slight pull upon it will cause the slab to fall, thus effectually closing the entrance. The box or cave is so narrow that the fox cannot turn around or burrow out of its stone prison. They all showed signs of having been recently looked after and set, which was regarded as

another evidence that the natives had departed only recently.

In the vicinity of the huts vegetation flourished. This was probably due to the sheltered location and great quantity of refuse animal matter lying everywhere around. Vegetation, although generally sparse in Greenland, occasionally flourishes with vigor in a few well-sheltered and watered spots. Some grasses of the varieties occurring in temperate climes are occasionally seen growing as high and luxuriantly as at home, and flowers of great delicacy both of form and color are found in profusion in some places. Yellow poppies and dandelions are also met with in considerable numbers; even the butterfly was there, several varieties being captured. Flies which resembled very closely the common house-fly were also seen, but were neither so tormenting nor so numerous as those found in civilized communities. They have not the opportunity to devote such a large amount of their attention to humanity as do those we have at home. The mosquitoes, on the contrary, are quite numerous in Greenland, and were a constant source of annoyance and discomfort. Our heavy clothing protected our bodies, but the faces of many of us were considerably disfigured and rendered quite painful by their attacks.

The scenery was grand and impressive. Glaciers were to be seen at every turn, and the breaking and falling into the sea of large icebergs was frequently witnessed. The noise and vibration caused by this breaking ice were almost the only sounds to be heard in these lonely waters,

and the echoes and reverberations among the solitude of mountains and gorges were productive of a feeling of awe which was perhaps increased by an appreciation of the dreariness of our situation and the knowledge of our distance from any civilized port or assistance. The slightest accident might have delayed our vessel and thereby rendered a return home, for that season at least, impossible, and subjected us to the often told experience of misery and hardship in this far-away and desolate region.

A few weeks only remained of the summer in which to navigate these uncertain and dangerous seas, and then it would be necessary to turn our prow southward.

All the following day was spent by the party sent out from the ship in a boat in searching for a suitable spot on which to build Peary's winter quarters. They found McCormick Bay to be an arm running off from Murchinson Sound in a general north-easterly direction. Its upper part was securely locked in ice, and a great glacier was visible running down at the head. The north-west shore, which was the one first investigated, was reached only after considerable difficulty, on account of the field of ice which stretched out from its sides far into the bay. It was bleak and inhospitable, and no suitable landing-place could be found. The north-east shore, on the other hand, appeared in every way suitable for a camp. A good beach running up to a little bluff about twenty feet high was found, which was continued by a gentle but steadily increasing incline as the ground rose to the rampart of cliffs that marked the edge of the great inland

plateau. The surface from the beach back to the cliffs was covered with a luxuriant growth of flowers. Yellow poppies nodded like daisies in the bright sunlight, purple heaths and other flowers abounded, and once in a while a butterfly would lazily float along in the balmy air. It was very difficult to realize that we were less than seven hundred and fifty miles from the Pole, and within a short distance of the spot where the Kane expedition had spent two miserable winters frozen in the ice.

A pretty flower-covered knoll, rising about twenty feet above high tide and some fifty feet back from the beach, was the site chosen for the camp, and the selection submitted to Lieutenant Peary for his decision. The lieutenant would have preferred a location on the north-west shore, where better protection would have been afforded from severe winds, but he acquiesced in the judgment of his comrades, and the site of his future quarters was formally settled. Now it was that the unfortunate accident which had befallen him was most severely felt, for he could not even see, except by the feeble aid of a mirror held over the skylight, the shores on which he was to make his home.

The next four days were consumed in hard and difficult labor. We were unable to anchor on account of the danger from drifting floes, and were compelled to steam slowly up and down the shore opposite the camp while the stores of the North Greenland party and the material for Peary's house were landed by small boats. This having been accomplished, a foundation

was prepared in the hard, frozen soil, the frame set up, and the building erected.

The situation of the house appeared to every one to be as favorable as could have been selected. A little stream of water ran near at hand, while numerous reindeer-tracks were found and several deer observed at a distance. Two pairs of large antlers were brought on board, having been found among the rocks, as well as the skeleton of a reindeer which was obtained at the base of a high cliff: as many of the bones were broken, it was thought quite probable that the animal had met its death by falling from the rocky heights above. The abundant signs of game in the neighborhood encouraged the hope of it serving in the future as a source of supply of fresh meat should necessity require. No attempt was made during our stay to capture any of these animals, because it was the wish of Lieutenant Peary that they should not be disturbed, as he thought it best to reserve them for possible emergencies later on. The waters abounded in seal and walrus, quite a number being seen during our stay.

The camp, not yet named, was situated on the north-east side of McCormick Bay. This bay is about ten miles long and five miles wide, and forms a well-sheltered and desirable harbor. Its latitude is $77^{\circ} 43'$, but the charts are so defective that it is almost impossible to indicate the exact position of the camp without elaborate surveys. Its present location is to be found by crossing Whale Sound, passing between Herbert and Northumberland Islands, thence across Murchinson Sound to

McCormick Bay, on the shores of which are Lieutenant Peary's quarters. The striking red color of the mountain-side, a mile to the eastward, is a prominent landmark should an attempt be made to find this spot again.



LIEUTENANT PEARY'S CAMP, MCCORMICK BAY.

The house being small, one might easily fail to observe it while looking from the bay, but the red mountain-side forms a sufficiently conspicuous object to attract attention. The water in the bay was quite deep, thirteen fathoms being found within a quarter of a mile of the shore—a circumstance that greatly facilitated the unloading of the vessel. We found considerable ice present, but, the south side being comparatively clear, we were enabled to stay without danger until the work on shore

was nearly finished and Lieutenant Peary and his companions were established in comfortable quarters.

On Sunday, July 26th, I went ashore early in the day to explore the high table-land situated back of the newly-established camp. This land rose abruptly from the level of the water to a height of some two thousand feet. From the ship it appeared to be an immense plain among the clouds, and was the only land of such an elevation that we had seen free from snow and ice. I endeavored to induce some of our party to accompany me in its ascent, but as none desired to undertake the climb, I was forced to make it alone. The rise was gradual from the water's edge for the distance of about a mile, when it began to get more difficult and dangerous. Loose earth and rock covered the side of the mountain, and much of the way was necessarily traversed on our hands and knees. The stones and fragments loosened by climbing rolled behind until they reached the bottom of the gorges and chasms hundreds of feet below. The stillness and quiet of the scene were intense, and the awesome feeling produced as one neared the top, after three hours of hard and trying work, was absolutely indescribable. The view from this point was simply magnificent. I was standing on the edge of what appeared to be a limitless plain. For a distance of two or three miles the ground was bare, free from snow and ice, and composed of small pebbles and stones with hardly any earth interspersed. Beyond this, and as far as the eye could reach, was a covering of snow and ice which is known as the "ice cap," and supposed to cover the greater part of Green-

land. No spurs of mountains or elevations of land were noticeable: for the many miles I could see the view presented one great unbroken level of ice and snow. It is only the land bordering the sea that shows the vegetation and holds the animals that have already been described: beyond must be one great solitude. I remained an hour on this vast plain, far from the ship and my companions, and had never experienced a feeling of more utter loneliness and undefinable fear than during this solitary wandering. It was with considerable relief that I arrived once more aboard ship, thoroughly tired and ready for bed, but not, however, without first interesting all the party so much with an account of my trip as to cause many of them to express their intention of accompanying me on another visit to "my plateau."

On the ensuing day the construction of Lieutenant Peary's house was going on rapidly, and as his men, with part of the ship's crew, were ample for the work, the services of the Academy party were not needed.

By ten o'clock the mountain expedition was ready to start, and with a good supply of food and instruments the ascent was begun. The day was a most agreeable one, the cloudless sky and genial sunshine making the temperature seem much higher than was indicated by the thermometer. A light breeze just ruffled the waters of the bay and caused a little surf to beat upon the beach. Mr. Kenealy, Dr. Burk, and myself kept together during the trip, while Drs. Sharp and Hughes, Mr. Mengel, and Professor Heilprin made the ascent from another point. Walking along the shores of the bay, we arrived at a

small ravine where a snow-fed stream came dashing down the mountain. Up this ravine we slowly wended our course, avoiding, as well as we could, the angular boulders with which its sides were strewn. As we advanced a careful watch was kept for a sloping bank by which we might be enabled to escape from the little canyon the stream had carved for itself, and which with every foot became narrower and more precipitous. A grassy slope at length was reached, and with occasional pauses we managed to climb without difficulty to a height of about one thousand feet. The ground up to this point was covered with vegetation of the sparse character seen in Greenland. Above, all was shaly rock which seemed to rise almost perpendicularly. Carefully picking our way, now on a ridge of basalt, now on shaly, slippery rock, we scrambled often on all-fours. The final twenty feet or so of the ascent was most difficult, being made over an outcropping of slate which cracked and splintered whenever touched. It was impossible to secure a safe foothold, and every time one slipped it seemed as if nothing but a miracle would prevent a fall to the depths below. Above the shale was a thick layer of gravel, crossing which our arms were over the edge of the table-land, and the climb was finished.

One can hardly describe the peculiar sight which met the eye as our heads rose above the surface of the plain. For over two hours we had been scrambling up the rocky cliffs without encountering a single ledge that was level or secure, yet in an instant we were in full view of an enormous plain, almost perfectly horizontal, and without

a single rock or stone to break its monotony. The place at which we reached the top was free from snow or ice, and, indeed, this was the reason it had been selected. About a mile back was the foot of the great ice cap, which extended, a dazzling expanse of white snow, until its distant border became merged with the sky.

The soil was made up of gravel and small pebbles, while here and there our botanist found little plants, among others the poppy and buttercup. Some of the flowers of the poppy, though evidently of the same species as the yellow ones of the lower levels, were here pure white in color. The buttercup appeared to be of the same species as our own, but was only an inch or two in height. Its leaves and flowers, and even the bulb, were the same as our common crow's-foot, only reproduced in miniature. The pebbles were of many kinds, and had evidently been swept by glacier action from rocks many miles away. Among them were quartz, jasper, and agate, two very pretty moss-agates also being found.

The view from the edge of the cliff, looking out to the sea, was simply magnificent. Directly beneath lay the blue waters of the bay, with our ship, looking like a toy, near the shore; Peary's camp was only a little speck on the landscape, and while we could hardly see the small boats as they passed from the vessel to the shore, yet when eight bells struck on the ship we heard the sound with faint distinctness. Immediately opposite the bay lay Herbert Island with its countless glaciers; just beyond was Northumberland Island, and still further out to sea was the rugged outline of Hakluyt Island, the far-

thest point north reached by Baffin in his famous voyage of 1616. The upper reaches of McCormick Bay were filled with ice, as was also Inglefield Gulf. Away to the south



MOUNTAINS AND TABLE-LAND BACK OF PEARY'S CAMP.

stretched the bold front of Cape Parry, and beyond it the open water of Baffin Bay. From Cape Acland to Cape Parry the view was superb, the blue water being dotted with icebergs of every size, which gleamed in the sun-

light like the sails of ships. The silence which prevailed impressed the others as it had me on the previous ascent, for no bird or animal appeared to break the utter stillness of the scene.

We seated ourselves on the flat ground and remained some time admiring the view, after which we turned inland toward the ice cap. Before reaching it the ground became moist and springy from the numerous streams fed by melting ice, but once upon the snow, all difficulty in walking ceased. We found it hard and compact, and the prospects of easy travelling in the spring for Lieutenant Peary seemed good should he succeed in reaching the ice cap with his stores of provisions. The difficulty we had found in climbing the mountain was probably much greater than what he will be likely to encounter in the early spring, when the glacier fronts, in all probability, will extend far out to sea, and provide a more easy means of ascent than can be obtained by scaling the cliffs.

The ice cap appeared to continue down to two large glaciers which reached to the beach. From the head of these glaciers it was unbroken, and extended inland with a gradual and uniform slope. Professor Heilprin, who advanced on its surface farther than did the others, reached an altitude of 2200 feet. At the edge of the cliff the height was 1950 feet.

A short sojourn on the ice satisfied our curiosity, and we returned by the same route taken in going up. The descent, for muscles unused for weeks to such violent exertions, was even more painful than had been the ascent.

The only signs of animal life which any of our party found on these desolate heights were a reindeer-track and a few tufts of fox-hair. The sparse vegetation can be but little attractive to either bird or beast, and during the greater part of the year the entire plateau must be covered with snow and ice.

A few hours' rest on board the ship prepared us for further adventure. Great flocks of guillemots and little auks were flying constantly overhead, and the temptation to shoot at them was almost irresistible. Lieutenant Peary, however, did not wish us to fire in the vicinity of the camp, lest the game should be frightened off; but in one of the ship's boats we easily reached a spot, some distance away, where there was no danger of the shooting doing any mischief, and where great flocks of birds were constantly passing. Our luck was only fairly good, though occasionally three or four birds would fall at a single shot. Their number was almost incalculable, passing all day long in flocks or in continuous streams over the ship. They flew with a steady, rapid flight, and furnished excellent sport, but their plumage was so dense that many which were struck by the shot escaped uninjured.

Later in the evening another party went to the entrance of McCormick Bay, and here had excellent sport, returning with large numbers of the birds. The majority of these were little auks, but there were also many black guillemots.

CHAPTER X.

A SCHOOL OF WHITE WHALES.—BIDDING GOOD-BY TO THE
PEARY PARTY.—AN ARCTIC STORM.—GROWLERS.—SAUN-
DERS ISLAND.—SOUTHWARD BOUND.—CRIMSON CLIFFS.—
RED SNOW.—THE CATHARTS.—THE ESKIMO
TAILOR.

THE days passed rapidly in these pleasant surroundings. The naturalists investigated the adjacent shores, and brought back to the ship many interesting specimens of birds' eggs, insects, and plants. Prof. Sharp dragged the bay, and obtained some rather curious forms of marine life, among others a small fish provided with a sucking arrangement, evidently for the purpose of attaching itself to other objects. The water teemed with small red shrimps, which constituted the principal food for the multitude of birds.

The work of unloading the ship still went on, and as everything had to be taken ashore in small boats, it was both tedious and troublesome. Wednesday dawned cold and unpleasant, and the snow, which fell the greater part of the day, rendered the decks wet and disagreeable. In the evening we were treated to the unusual sight of a school of white whales. They were the first we had seen, and as they came quite near the ship, we had ample opportunity to observe them carefully. They

remained near us for about half an hour, and their playful and sportive actions afforded considerable amusement.

The sixth day of our stay in McCormick Bay was so foggy that only at occasional intervals were we able to see the shore, a quarter of a mile distant. The house having been so far completed as to render a longer stay unnecessary, it was proposed to start on the homeward trip that night, provided the weather cleared sufficiently to enable us to see our way. The fog, however, continued through the night, but lifted at 5.30 the following morning. We were all called at this hour to bid good-by to Peary's party. Of the Peary expedition all except the lieutenant and his wife had stayed aboard, so as to write letters for us to take home for them. We had become greatly attached to one another, having lived so intimately together for two months as one expedition, and the parting, possibly for ever, although not demonstrative, was painful to all. While some were to remain in a desolate and unknown region that is only within reach of civilization for a few short weeks during the year, the others, after their severe experience in forcing a passage northward, were to undergo a perhaps still more dangerous voyage to their native land.

It made us all sad and thoughtful, and after exchanging a few souvenirs and well-wishes we bade each other good-by. Three shrill blasts of the whistle and a volley from our guns signalized our departure. Never had I listened to a farewell salute that affected me so sadly, showing the different effect produced by the strangeness of our surroundings and the peculiarity of the circum-

stances. As their boat rowed off they gave three cheers, but not with the hearty ring that I had heard from the same throats before. The signal-bell in the engine-room rang full speed ahead, and in a few minutes we departed from the most northern white settlement on the globe, leaving our companions to face their chosen duty in that almost merciless Arctic climate.

Our course south was again by Murchinson Sound and between Herbert and Northumberland Islands. The wind, which had been increasing, soon turned into a gale, and by noon a storm was fairly upon us. It kept getting worse, and, anticipating trouble, everything about the vessel was made snug; as the barometer continued to fall, we ran the ship under the lee of the mainland, hoping to escape some of the fury of the storm. In one hour the wind had risen to almost hurricane force, and the water was lashed into such foam and spray that it was impossible to see more than a couple of ship-lengths ahead. Occasionally, through a break in the mist, the ice-covered cliffs of Cape Powlet could be seen, when was to be had a view of the wildest and most magnificent grandeur. The fearful grinding and clashing of colliding bergs, the tumultuous sea, lashed to its utmost fury, and the screeching and roaring of the mighty wind combined to produce an impression never to be forgotten.

Such experiences, with the strangeness of our surroundings, so different from those to which we had been accustomed, needed but little more to convince us that we were on another planet. So terrific was the force of the gale that the stay-sail was blown from its gaskets, and

the engines, although going at full speed, were not always able to keep the ship's head to the wind, even with the aid of the most careful manœuvring. Several times we were driven toward the lee shore, which was known to be less than a mile away. The thickness of the weather added much to our anxiety. Every few minutes a gigantic iceberg would loom like a spectre through the mist, sometimes coming within a few yards of us, and making as serious and horrible a situation as can well be imagined. The frightful howling and screaming of the winds through these lonely fiords could not be conceived by the most vivid imagination. The deafening roar of crashing ice and colliding bergs added to the experiences of this frightful day, and the fragments and débris increased our consternation by pounding against the ship's sides. The huge fragments of ice became so abundant later as to have a very perceptible effect in subduing the force of the waves, and thus allowed the ship to ride more easily; but the storm continued with unabated fury, the wind still came with hurricane force, and it was not until evening that the weather cleared sufficiently for us to see our dangerous proximity to the rocky coast of Northumberland Island. An effort was now made to get under the lee of Cape Powlet, but although we were able to get quite near, the force of the wind would not allow us to hold our position, and after three hours of hard work we were driven out to sea.

The danger from the ice was now greatly increased, as the sea was filled with the broken fragments of ice-

bergs, forming what the sailors know as "growlers." These are large, water-logged masses of ice, ground by attrition with other ice and bergs into a roughly spherical form. They rise and fall with the waves, often disappearing beneath the surface, and constitute one of the most dangerous forms of ice found in Northern seas. As they rise the water rushes from their sides back into the sea, producing a roaring or growling sound which can be heard quite a distance off; hence the name "growler." One rose directly in front of the vessel, but fortunately struck the ship slantingly on her bows. Had it risen beneath the hull, she would almost inevitably have foundered. At last, however, the wind seemed to moderate, and, the barometer beginning to indicate better weather, we were able to keep on our course to Saunders Island, which now became visible. On our way toward it we passed Fitzgerald's Rock, a bell-shaped projection which had attracted our attention on the passage up. It had been our intention to stop on the voyage homeward, but the sea, which was rolling high, and the still heavy wind made a landing impossible. Indeed, we had little desire to attempt it, for the dark and cloudy sky had cast such a gloom over everything as to dampen all ardor for new explorations. The next day found us at Saunders Island, whither we had come for birds and with the hope of finding Eskimo relics. We circumnavigated the island, looking for a safe landing-place, which was finally found; but the wind, having again increased to almost a gale, made it impossible to get ashore in safety, so the ship was run under the lee of the island, the cliffs

of which rose abruptly from the water's edge to the height of many hundred feet.

Myriads of birds had their nests on the face of these cliffs, and a rifle-bullet sent to these otherwise inaccessible heights startled so many birds as to almost darken the sky as they rose in the air and left their lofty homes in flight. The sides of the rocks were about two miles long and so covered with nests and birds as to give to them a characteristic color. It was our hope that on the morrow an opportunity would be afforded us of going ashore and having a close view of this interesting island, the appearance of which from the ship was very picturesque. On its southern side a large and beautiful cascade was seen falling from a dizzy height to the sea below, and the patches of green near the falling waters showed the beneficent influence of fresh water and sunlight. This rich harvest of strange mosses and lichens waiting to be gathered made our botanist especially anxious to get ashore. The wind was blowing so hard that Captain Pike endeavored to make the ship fast to an iceberg which was thought to be firmly grounded; but the sailors, who had taken our hawser in a small boat, had hardly reached it when it was found to be moving, and they were nearly crushed between the berg and the vessel. It was only by the most strenuous exertions that the boat escaped and they were saved.

Anchorage was finally found in fifteen fathoms of water, but the bottom being smooth rock, the anchor did not hold the ship well against the heavy wind, and we shifted our position several times during the night. An-

other day was passed lying to under the lee of Saunders Island with the wind still blowing a gale, and this time we changed our location but little, as, with the aid of our anchors and the use of steam during the hardest blows, we managed to keep under the high cliffs, which continued to afford some shelter. The squalls, which followed one another in quick succession, were most fearful and violent, and the few moments of intervening calm seemed only given to enable the gale to increase its strength in its efforts to overwhelm us. The wind, which had blown with almost unabated fury for the last four days, at last began to moderate, and late at night, by steaming close under the cliffs, we were enabled to approach near enough to shore to enter comparatively smooth water and make a landing in a small boat.

One end of the island was flat, and there it was that we found some signs of Eskimo life. There were several unoccupied stone huts, a sledge, the framework of a kajak, some old pieces of iron and bone tools, and a few other evidences of the place having been used recently as a camp by natives. There were also some stone graves containing a few scattered bones, but nothing that indicated that there had been any recent burials. After completing our investigations we returned to the ship and once more started on our journey southward. The next day, August 2d, was rainy and thick, much of the grand and lofty scenery which characterized this part of the voyage being but dimly visible through the fog and mist—a fact greatly regretted by all. Our run was made close to the land, as the sea further out was filled with

ice. Several large glaciers, which had been seen on our northward journey only at a distance, were now observed at close range. Their immense extent readily explained the origin of the great number and size of the icebergs everywhere visible. The famous Conical Rock, a curious basaltic formation described long ago by Captain Ross, was passed, and we were soon under the lee of Cape York, whose "crimson cliffs" gleamed in the occasional bursts of sunlight.

These crimson cliffs did not appear by any means so highly colored as we had expected to see them, but they presented nevertheless an altogether unique appearance, as everywhere else in Northern Greenland the rocky cliffs, rising abruptly from the sea, exhibit the familiar stratified formation of sandstone rock. Instead, however, of being of the uniform dull-brown color commonly seen in this latitude, they were of a tawny reddish hue. Opinions differed as to the cause of this peculiarity. Some of the party believed that it was due simply to a different colored sandstone, but the botanist claimed that it was caused by the great masses of an orange-colored lichen which grew everywhere in abundance.

Patches of the red snow peculiar to the Arctic regions were observed on the glaciers and in the shady nooks of the ice, but its color was wholly different from that of the curious cliffs mentioned above. Later, we had an opportunity of gathering and examining some of this red snow, which occurs in patches and exists only on the surface: an inch below, the snow was as pure a white as that found anywhere. The color was not uniform

even on the surface, but occurred in streaks. On closer examination it was found to exist in the little crystals of snow which composed the surface, and even in these the tint was not the same throughout, but radiated from centres. When the snow was melted it formed a bright-red liquid about the shade of claret punch, and on standing the coloring matter gradually settled to the bottom as a deep red sediment, which, under the microscope, proved to be composed of a minute-celled plant, the *protococcus nivalis*. So intense is its color that even under a power of four hundred diameters, which causes a red corpuscle of the blood to appear almost colorless, it was still of a brilliant red hue.

Twelve miles below the cape several skin tents of natives were indistinctly seen through the fog. Soon the sound of "Ki-mo" was heard repeatedly, coming from the shore. This is the cry by which the Eskimos greet the arrival of a ship, and in a few minutes the natives were seen coming toward us over the ice, some on foot, and others with sledges and dogs. Their peculiar attire and various antics expressing delight presented a most interesting spectacle. The ship was made fast to the ice, which reached some distance from the shore; but even before we had our ice-anchors firmly inserted the natives were climbing over the sides. As soon as the ship was properly secured some of our party, including myself, went off on the ice. This, although quite thick and heavy, was rough and much broken up, with seams of water running in all directions. While the ship was approaching the shore the tents

which we had descried through the fog again came into view. They were at that time so far off as to be scarcely distinguishable from the many peculiarly-shaped rocks



CAPE YORK.

which constitute the mountain-sides in the vicinity of the cape; it was toward these tents that our course was directed.

We had scarcely left the vessel when some of the na-

tives on board noticed that we were going in the direction of their village, and one of them was soon over the side and hastening after us. Seeing that he wished to accompany us, we stopped and awaited him, as it was evident from his manner that he was unwilling for us to venture across alone. We were only too glad to have him join us, as travelling over the broken and fissured ice was both difficult and dangerous. He proved to be a most merry little fellow, and with him acting as guide we were able to progress more rapidly and with greater safety than we would have been able to do if left to ourselves. He would run ahead, jumping from one cake of ice to another with the greatest ease and agility, stopping only when one of us would get a fall or a foot wet in the water which was lying here and there in pools on the surface of the ice; then he would evince his amusement at our discomfiture by giving way to most hearty laughter. Clad as we were in heavy overcoats and long boots, we must indeed have presented an awkward spectacle in our endeavors to keep up with our nimble companion; however, under his guidance we soon reached the shore.

The native village was found to be situated about a quarter of a mile from the water's edge, up the side of the mountain. There was no path, and we had to climb over and around the large rocks and boulders with which the ground was everywhere covered. This was even a more difficult and laborious undertaking than our passage over the ice. The rocks, being wet from the rain and fog and covered with lichens, were very slippery, and,

encumbered as we were by heavy clothing, our progress was necessarily slow.

Arriving at last at the village, we found it much more extensive than the one already seen farther north. It consisted of about a dozen skin or summer houses and twenty stone huts, used only in winter. The village was situated on very rough ground, the tents being erected wherever space enough for them could be found between the boulders. They were rather close together, but the stone huts, on the contrary, being built wherever a favorable spot could be found, were more scattered, most of them being near to the sea.

The place was practically deserted, the inhabitants having gone off to our ship. A few women, children, and dogs were all that greeted our arrival; they seemed greatly astonished at such an unexpected visit, and were evidently somewhat alarmed. The younger children showed their fear by crying and clinging closely to their mothers. A few presents of needles soon assured the women of our friendliness, and at once caused peace to reign. On looking around dirt and refuse were, as usual, found to be everywhere present. The bones and partly-consumed carcasses of walruses, narwhals, and seals were scattered indiscriminately about. The water from the melting snow of the mountains trickled through the village and with the little snow between the rocks and the omnipresent filth made the walking disagreeable enough.

We separated, and wandered through the place looking into tents and seeing what we could. Peeping into

one of them, I saw a woman diligently employed in cutting and sewing skins. Strewn all about the interior



ESKIMO BONE NEEDLE, TWO-THIRDS ACTUAL SIZE.

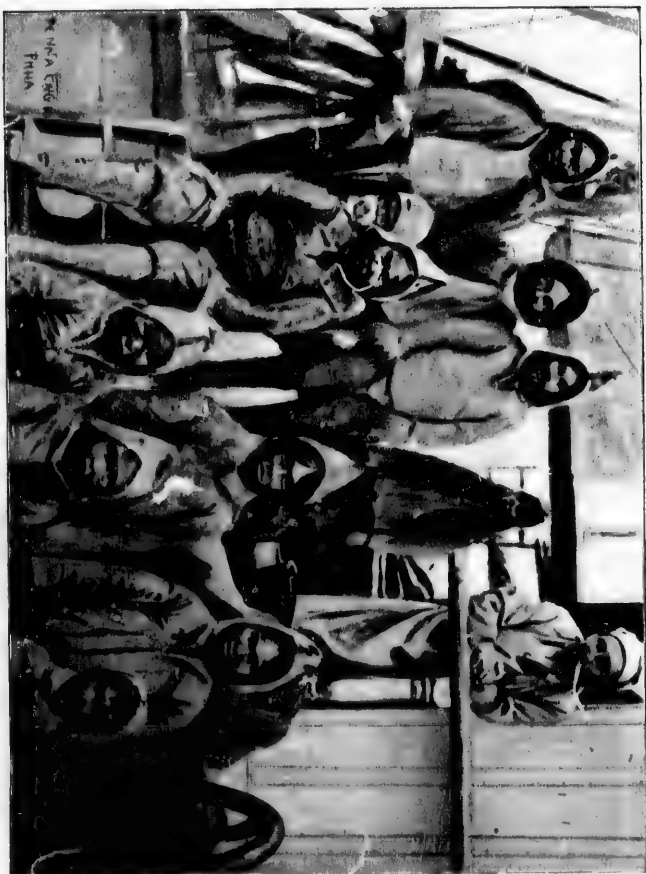
were furs and sewing implements, so it appeared evident that I had found a tailor. Although the clothing of all of us needed repairs and considerable patching, I especially was suffering for a new pair of trousers. Here appeared to be a chance not to be lost, so negotiations were at once opened with the lady for their manufacture by presenting her with a knife. It was not without considerable difficulty that I succeeded in conveying to her an approximate idea of the style of article desired, as I wished them to reach to the feet instead of only just below the knee, as was "a la mode" at Cape York. That much was at last accomplished, but the addition of pockets being beyond her powers of comprehension, I was compelled to forego those luxuries.

The question of style having been decided, she proceeded to take my measure. This was done in a rather novel manner. Having selected a seal-skin of sufficient length and width from a pile in one corner of the tent, it was wrapped around the limb, the fur side being placed inward; the surplus material was then bent over with the fingers and the skin removed. The crease so formed served as a guide for the next procedure, which consisted in biting along the line with the teeth so as to cause the fold to lie flat. This being accomplished, it

was again applied to the limb and a few slight alterations marked with an additional bite here and there. The shape having been outlined, the skin was again removed, and the lines thus marked being followed with a rudely-made knife, the cutting of the trousers was completed.

With the object of facilitating the work, I offered her the use of a pair of scissors which I had brought with me from the ship, but, being entirely unfamiliar with their use, she preferred her own knife, and, seeing I was only delaying operations, I ventured to make no more suggestions. Desiring to hasten their manufacture, I gave her a few additional needles, but soon found that Eskimo character resembled in some respects that existing in more temperate zones, and that it was not always good policy to pay in advance. Instead of working faster, my tailor lagged still more; indeed, so little progress was made, and so evident was it that she was only endeavoring to extort additional pay from me, that, appreciating my mistake, and despairing of getting my much-needed article of clothing completed, I decided on taking them away as they were.

Just at this moment I was discovered by some of my companions from the *Kile*, and, as they were about returning to the ship, I got ready to accompany them. Taking the unfinished trousers away from the woman, who parted with them reluctantly, we started off. We had not gone far when we saw that she was following us, appearing to regret her unseemly behavior and wishing to make amends. The ship was soon reached, and, finding the decks full of natives, I at once contracted with



A GROVE OF CAPE YORK ESKIMOS.

some to have the work completed on board. Several women began on them, and as soon as my back was turned my original tailor joined the group. By the laughter which soon arose I was convinced that they appreciated the true state of affairs and were amused at her discomfiture. The trousers were soon finished, and I wore them until our return south necessitated a change to more civilized attire.

As many as fifty Eskimos had come to visit us, some on foot, and others with dogs and sledges. They brought along many articles to trade; indeed, they seemed to have with them almost everything they possessed, even to the toys of their children.

Our visitors were of all ages, sizes, and conditions, including the babies, who gazed on the strange sights with wonder and interest. Some of them were not over a month or two old, being carried on their mothers' backs. Their cute little faces and bright black eyes peering out from their odd resting-place made quite an interesting picture. Many of the smaller children were observed munching away with great avidity on raw birds which had been given to them by the sailors, and exhibiting as much pleasure as the civilized child would experience in eating cakes and candy. After consuming the bird they invariably rubbed the fatty skin over their faces; this they are taught to do at an early age, as the coating of grease so applied serves to render the exposed skin less sensitive and protects it from the extreme cold of winter. Some of them presented, indeed, a most ludicrous appearance owing to

the feathers which remained on the face after the completion of this procedure.

The adult portion of our visitors wandered about the ship at their pleasure, looking into every nook and corner and exhibiting the utmost curiosity. They were so good-natured, harmless, and childlike in their manner that it was a pleasure to show them whatever we could. They were much delighted in looking at themselves in a mirror, and a pair of blue-glass spectacles loaned to one of them were not returned until they had been passed from hand to hand and each had had a look through them.

CHAPTER XI.

ARCTIC CLOTHING.—A SLEDGE-RIDE.—AN INDIGNANT ESKIMO
LADY.—THE NATIVE DOGS.—SLEDGES.

THERE being such a large number of natives on the ship, an excellent opportunity was afforded us of observing the peculiar character of their clothing and learning how they protected themselves from the rigors of their climate. The mode of dress in both sexes was much alike, and consisted of a jacket, trousers, and boots. These were made either of the skin of the bear, seal, dog, or reindeer, and often a combination of all. Seal is the most frequently used, the others being less common. The jacket covers the body from the waist up, and terminates in a hood which covers the head, but leaves a part of the face exposed. This jacket is made in the form of a single piece, and is put on by being brought down over the head; no buttons or other fastenings are used except when mittens are worn, which are tied around at the wrists. The hood fits closely to the side of the face, only leaving the latter exposed from the forehead to the chin.

The trousers reach from the waist to the calf of the leg, and have two openings a few inches long in the sides, which are closed by means of a cord. The boots are always made double, the inner part being the skin of some long-haired animal, such as the bear or dog, with the fur turned inward, and the outer of seal-skin

with the hair removed. They are drawn up over the lower end of the trousers and bound firmly about the calf of the leg with leather thongs, thus making the costume water-tight up to the waist. Underneath this outer suit there was worn, by some, an under-jacket, likewise extending to the waist, but without the hood. This was made of bird-skins sewn together, and worn with the feathers next to the skin. The jacket and trousers just about met at the waist; indeed, so slightly protected was this part of the body that in bending over the bare skin was frequently exposed.

The hands are protected by mittens made of dog-skin. These are not very long, but sufficiently so to go up under the end of the sleeves of the jacket, the point of meeting being made more secure by binding with a strip of skin.

The only difference in the costumes of the women and men was in the jacket. In the former the hood was made somewhat higher in order to accommodate their hair, and a few possessed, in addition, a pouch on the back in which the infants were placed and so carried around. Some of these pouches had an opening cut in them, so that the child could rest in contact with the bare skin of its mother, and in that way obtain additional warmth. The child, usually naked, is placed in the pouch and packed around with fur and feathers. When the mother desires to take the baby out, she stoops forward, bends her head well down, and gives her body a shake. This starts the infant from the pouch, and the mother, raising her hands over her shoulder, draws it forth.

The jacket and hood, being made in a single piece, are so rigid and fit so tightly that it is almost impossible to turn the head without moving the body. When it is desired to look in any particular direction, they turn around with a stiff, awkward movement until the object is brought within view. The fur clothing, being made of skins that are rather hard when cured and not perfectly pliable, prevents their moving with that freedom which is possible with other people. This gives to their movements a stiff and automatic character, which at first sight appears quite droll, and strongly reminds one of the actions of the puppets seen at shows given for the amusement of children. The small size of the Eskimo as compared to the average European also adds to the effect and tends to enhance the resemblance.

The natives were continually going backward and forward from the vessel to the shore, bringing things for trade. It was during one of these trips that I was enabled to enjoy the novelty and pleasure of a sledge-ride, Eskimo fashion. For a few trinkets a native placed



ESKIMO BOY.

himself, his sledge, and his dogs at my disposal. I had hardly seated myself on the furs with which the sledge was covered, and indicated that I was ready to start,

when the Eskimo's wife, who had been left on the ship, came out on the ice after us. She showed at once her displeasure at our breach of etiquette in deserting her, and evidently wished to go along. The Eskimo demurred, and seemed anxious to know what my wishes were in the matter. Noticing the woman's determination, and not wishing to lose my ride (besides being the cause of domestic difficulty), I gallantly intimated by signs my consent and even pleasure at the lady's company. In the mean time, while they were wrangling with each other, the dogs had taken advantage of the delay thus caused, and started a fight amongst themselves, getting their harness so tangled up that it required some time to put the team in running order again. Finally, Mrs. Eskimo and myself got properly seated on the sledge, and the dogs were started off at a lively trot, the driver running alongside. He controlled and guided the dogs with such skill as to keep a uniform tension on the traces, and occasionally, as the team increased its speed, would jump on the back part of the sledge and ride until some rough ice or a strip of water interfered with our progress.

Not infrequently the dogs would jump over a crack in the ice, and before the sledge could be stopped it would bring up against the opposite side with such a sudden jar as to throw one from the seat. On such occasions the driver would lift the front of the sledge, and, with a few cracks of the whip, again proceed onward. When a fissure was too large to be crossed in this manner, he would follow along its side until a narrower place was

found, over which the sledge was pushed, one end being allowed to rest on the ice on each side. By this means a bridge was formed over which both ourselves and dogs crossed in safety. The Eskimo dogs appear to have a great dislike for water, and would not attempt the crossing of any cracks so wide as to expose them to the risk of falling in.

As we began to encounter much loose and broken ice, and the travelling was very rough, I requested my guide to return to the ship. We were soon speeding along over a more regular surface, the smooth gliding homeward in the cold, bracing air being most exhilarating. By this time Madam Eskimo had quite regained her temper, and assisted her husband by yelling their peculiar cry, "Ka! ka!" at the dogs, which seemed to incite them on and kept them moving at a lively pace. Upon our arrival at the vessel the driver at once proceeded to cut a couple of holes in the ice, close together and meeting at the bottom; the traces were then passed through from one to the other and tied on top. The team having been safely secured in this manner, we went on board; the dogs howled dismally at being so unceremoniously deserted, but the unheeding driver and his spouse were soon on deck mingling with the others.

The Eskimo dogs are about two feet in height, and resemble more the wolf than the domestic dog of our country. Their hair is long, coarse, and oily, and the head resembles that of the Pomeranian or spitz dog, the snout being pointed and the ears erect. Their legs are quite sturdy and thick, the body compact and strong, and

the bushy tail is carried curled over the back. In color they are principally reddish or yellowish brown; black was exceptional, while white was more common, but not so generally met with as the color first mentioned.

There seemed to be a difference in type between the dogs used in the south of Greenland and those found with the wild natives of the North, these latter being smaller and more wolfish looking, although possessing the same general characteristics. The Eskimo dogs are wild-looking animals, and have a cowardly, sneaking expression, which is no doubt largely due to their half-starved condition and the indifference and harshness of their masters. It is only when employed in drawing the sledges that they are given food in any quantity, and the hungry creatures about the native camps are continually howling and fighting among themselves. They subsist on the blubber, meat, and animal refuse given to them by the natives, and at no time would they touch the salt meat, bread, or biscuit thrown them from the ship. Their fur is much used by the natives for clothing. They are harnessed to the sledges by means of a leather collar to which is attached a line, generally of walrus-hide, about fifteen or twenty feet in length. These lines, one from each dog, are fastened to a heavy thong of skin between the runners of the sledge. Five to eight dogs usually constitute a team. They travel side by side, being guided only by the voice of the driver and the occasional lashings of a whip which is so long and wielded with such dexterity as to make them pursue any desired course.

The sledges are from six to eight feet in length and

about two in width, the runners being eight inches high and made up of fragments of wood and bone tightly bound together with strips of skin. Wood is so scarce that even the smallest pieces obtainable are utilized, thus causing the sledges to look like mere patchwork. The runners are shod with pieces of walrus-tusks about a foot long, which are bound to each other and to the runner with thongs of hide. These thongs are passed through holes in the ivory and countersunk to avoid being worn out in passing through the snow.

The top of the sledge is composed of pieces of wood, and occasionally of bone, passing across from one runner to the other, tightly bound together. These pieces are not placed close to one another, but at intervals of six or eight inches. At the rear end of the sledge are two uprights, about two and one-half feet high, connected by



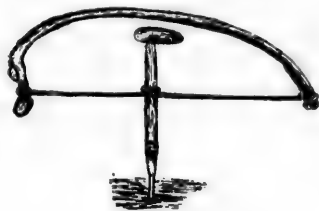
SLEDGE.

a cross-piece, the whole forming a handle which is used to guide the sledge at times, and also to lift it over obstructions. Coming from beneath its front, and fastened to the inner sides of the runners, about a foot from their

ends, is a piece of thick strong skin. It is to this that the harness of the dogs is attached when travelling.

The whole of the sledge is apt to be so covered with dirt and grease as to almost conceal its method of construction. Those which we saw all appeared to be very old, and had evidently descended from previous generations. Here and there, in some of them, were noticed pieces which had been inserted recently. When a sledge begins to show the effects of the hard usage to which it has been subjected, it does not break up all at once, but rather gives out in some particular place. This spot is

then mended, either by a new piece being inserted or by being rebound with thongs, and the sledge thus enters on a new lease of life. The ease with which repairs can be made obviates the necessity of building



NATIVE DRILL.

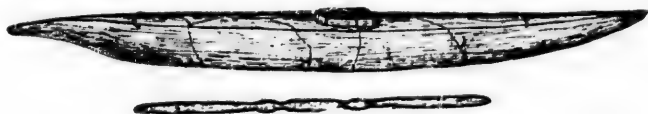
new sledges, and, consequently, after one has been constructed, it lasts almost for ever. Notwithstanding their clumsy and ungainly appearance, they glide over the ice quite readily, the ivory runners offering but little resistance. While solidly constructed, they nevertheless possess sufficient give and elasticity to yield to the jolting experienced in travelling over rough and uneven ice, thus making riding in them comfortable.

CHAPTER XII.

BOWS AND ARROWS.—SPEARS AND HARPOONS.—HUNTING THE
SEAL AND WALRUS.—SCARCITY OF WOOD.—CHILDREN'S
TOYS.—MICKEY AND HIS DOINGS.

UNTIL our visit to these most northern Eskimos no one had ever observed them to possess either boats of any description or bows and arrows; but among the natives of Whale Sound we found a couple of kajaks, and also a few bows and arrows.

They were similar in form and construction to some which we afterward saw lower down, at Cape York. The kajaks were of about the same size as those of the

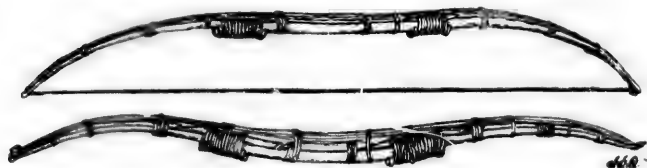


KAJAK AND PADDLE, WHALE SOUND.

Eskimos in the neighborhood of the Danish settlements, but were neither so neatly nor so well made, being both more clumsy and heavier. The skins of which they were built did not appear to have been so carefully prepared as those used by the more southern natives, the hair often being allowed to remain on them in places. The seams also were neither so regular nor so nicely sewn, this being probably due to the fact that bone

needles were used, instead of steel ones. These latter must have been quite rare among them, if, indeed, they possessed any at all, although even the natives of Whale Sound, when we gave them some, appeared to recognize and understand their use.

The bows which were obtained from the natives are quite peculiar both as regards the materials of which they are made and their method of construction. They are composed, usually, of three large and four small pieces of bone, bound firmly together with an animal material resembling catgut. The large bones are the ribs of the reindeer, three being used in order to make a bow of sufficient length. These are placed end to end, the adjoining surfaces being cut off square, and not overlapping. The two extremities of the middle piece thus simply rest against the inner ends of the other two bones, the point of junction being strengthened by means of a thick piece of bone, about two inches long, below, and a thin strip, about four inches long, above. The whole joint is then tightly wrapped with thongs. Run-

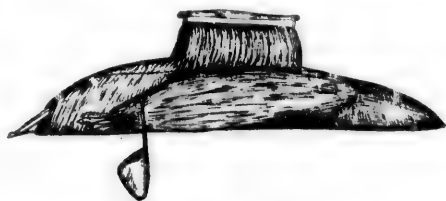


BOWS.

ning from one end of the bow to the other, and stretched tightly over the back, are a number of thongs, which in the finer bows are made of plaited strands; one of them

had fifteen of these bound to the bone with the same material at intervals of three or four inches. In the commoner bows the material used for binding and strengthening them is much coarser, and evidently consists of strips of some kind of skin; one of the number had only three such cords, and even those were thick, and not plaited. Another one possessed, besides the usual number of pieces, three additional ones. One was a long, thin piece of bone, and the others two thin strips of a soft wood resembling pine. This shows the ignorance of the people concerning the properties of various kinds of wood, because the use of so soft a wood for the purpose of strengthening the bow could have been of no service whatever. These bows are about two feet and a half long, quite elastic, and serve their purpose fairly well.

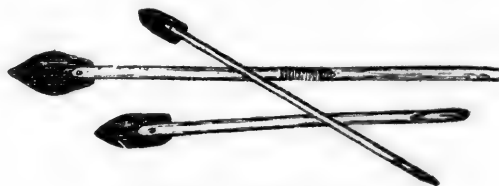
The arrows are between a foot and a half and two feet in length, and composed of a shaft of white pine wood with a point of iron. The shaft was rather thick



BOW-CASE AND QUIVER.

and clumsy, and not infrequently, on account of the scarcity of wood of all kinds, made of two or three separate pieces of wood or bone, joined together by being

bevelled, overlapped, and wound with a fine animal fibre. The part of the shaft that received the bow-string was flattened, and against the side of one of the arrows was bound a single small feather, which, however, could



ARROWS WITH BONE SHAFTS.

have been of little or no service in guiding its flight. The presence of this feather was the only indication of the natives having any knowledge of their use in steadying an arrow on its course, and is strongly suggestive of the bow and arrow being employed only at short range. The points were made of iron or ivory from



ARROWS SHOWING THE SPLICING OF THE SHAFT AND A SINGLE SMALL FEATHER.

three to five inches long and shaped like a spear-head. How, in the absence of any suitable means of heating the iron, these arrow-heads were fashioned was a mystery to us.

On examining the bundle of arrows which were obtained from the natives at Cape York, my attention was attracted by one which appeared to have some letters upon

it. On scraping away the rust and dirt I was astonished to see the words "Dr. Hayes, Ex. 1860," plainly stamped in the iron. Owing to our inability to understand or



ARROW-HEAD FROM THE HAYES EXPEDITION OF 1860, ONE-FOURTH ACTUAL SIZE.

communicate with the natives, we could not obtain any history of this most interesting relic, nor any information as to how it came into their possession. The care with which they treasure iron can be appreciated when we remember that they must have had this piece for over thirty years. It had probably been made, originally, from an old knife or other ship's article which had been marked with the explorer's name.

Their most useful hunting implements are spears or lances and harpoons. The former, as compared to the



Tip.

Point.

Cap.

Shaft.

SPEAR OR LANCE.

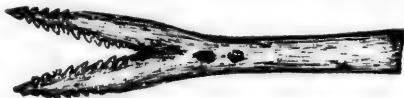
latter, are simple in construction, consisting of a wooden shaft with an ivory point tipped with iron. The shaft, on account of the scarcity of wood, is sometimes made up of several short pieces spliced together with the skill for which the Eskimos are noted. It is shod at its extremity with a little cap or block of ivory strongly secured

by thongs of walrus-skin. This cap has on its upper surface an oval-shaped hollow or depression in which the base of the ivory point rests. The ivory point is from six to eighteen inches in length; at its base it is about three-quarters of an inch by an inch and a half in size, and tapers slightly to the point, which is usually provided with a leaf-shaped (not barbed) piece of iron. The base is rounded in an oval manner with a flat edge, and fits into the depression or socket in the ivory cap.



SPEAR-POINT, ABOUT ONE-SIXTH ACTUAL SIZE.

The Disko spears, on the contrary, have the socket in the base of the ivory point. Two strong thongs of walrus-hide pass from the point to the cap, binding them firmly together. When the spear is thrust into an animal, the point slips off the shaft, but still remains connected with it by the two thongs of skin. In this way the wooden handle is prevented from being broken by any sudden movement the animal may make.



SPEAR FOR SMALL ANIMALS, ONE-HALF ACTUAL SIZE.

The harpoon is a much more intricate weapon. It is, indeed, remarkable how a race so low in the scale of development as the Eskimos could have devised such an ingenious implement. In many respects it is unique,

and supasses in efficiency even the sword-fisher's iron, which it greatly resembles. In ingenuity and adaptability for the purposes to which it is put it is, perhaps, the best that any savage or even semi-civilized race has produced. It has evidently been evolved from the spear just described, but is designed for throwing, and not for spearing. The whole apparatus consists of several distinct parts, which may be described separately. They are the harpoon itself, the harpoon-line, and the float-



HARPOON OF THE MOST NORTHERN ESKIMOS.

bag, corresponding to the wooden cask of the sword-fisher.

The harpoon is made up of a shaft and point differing in no material respect from the spear already described. The point is somewhat rounder and attached to the shaft by the means already detailed, but is blunt at its extremity. To it is added an extra detachable tip, almost invariably shod with iron. The iron is usually a piece of knife-blade, an old hoop, or other fragment which has by chance fallen into the possession of the Eskimo. This is ground with infinite labor to a point and firmly riveted in a slit in the ivory. The point of the harpoon fits into a hole in the back of the tip, the ivory being cut away from one of its sides in such a manner that if the shaft is bent over on one side, the tip comes off, but if pressed to the opposite side, the whole ivory tip can be manipulated as a single piece. To this tip the

line is fastened through the hole in the ivory, as shown in the illustration.

The line, which is very strong, is almost always a single piece of walrus-hide, obtained by making, with great care, a spiral cut commencing at the neck and end-



HARPOON-TIPS, CAPE YORK.

ing near the hind flippers. This strip, frequently one hundred feet in length, is then twisted and worked in blubber oil until perfectly pliable. The line is neatly coiled up and laid on a sort of bracket or framework which is erected immediately in front of the kajaker, the harpoon resting in leather thongs by its side. To the extremity of the line is attached a float composed of the entire skin of a seal dressed and worked in oil. Every aperture in the hide is carefully closed with plugs of ivory grooved so as to hold the ligature with which the skin is bound, and made absolutely air- and water-tight. One, however, is merely stopped with a wooden plug, so that the bag may be readily inflated. This bag is placed in a convenient position on the deck of the kajak, and so arranged that, while safe from accidental disturbance, it can be released instantly.

The shaft of the harpoon is more carefully constructed than that of the spear, and has near its end a most inge-

nious throwing device. This consists of a flat or nearly flat piece of wood about two feet in length, which may



HARPOON OF THE DISKO NATIVES, SHOWING THE THROWING STICK.

be called a handle or throwing piece. In the end of this is a hole, into which fits a curved peg of ivory on the shaft of the harpoon, while the other end is so carved as to furnish a comfortable grasp for the hand.

In using this implement on a seal the kajaker grasps the harpoon firmly in his right hand, releases his seal-skin float, and with his left hand steadies the boat by means of the paddle placed crosswise on the surface of the water. The throwing piece is held firmly in the hand, while two fingers only grasp the shaft. Raising the arm, the weapon is hurled with remarkable accuracy and to a very great distance. The handle becomes detached and remains grasped, while the shaft receives the whole momentum imparted through the ivory pin by which it is connected; the speed attained is such that



HARPOON-TIP, DISKO.

one hundred feet is not an extraordinary distance at which the Eskimo essays the killing of a seal. The line instantly uncoils, the air-bag follows, and the animal is

almost invariably secured. Diving, it seeks to escape, but its first movement dislodges the shaft, which, with its ivory point, floats away unharmed. The Eskimo's first object is to secure this precious portion of his worldly possessions. He afterward follows the track left by the



AIR-BAG.

air-bag, sure that his prey cannot escape. The seal, being unable to drag the bag beneath the water, is almost certain to be captured, provided the harpoon-head has been securely fastened, though many thrusts with the spear may be necessary to finally despatch the animal.

An air-bag similar to the one shown in the illustration is

then attached to the carcass, and the Eskimo proceeds to hunt for another victim.

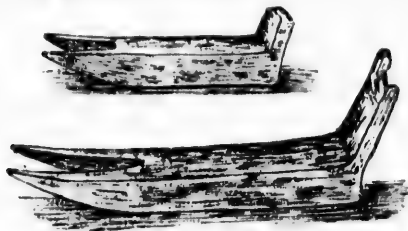
The circumstances are quite different in hunting the walrus, which, when attacked, is one of the fiercest of animals. Instead of endeavoring to escape, it almost invariably turns on those who dare to molest it. A kajaker never disturbs one except when it is near the edge of an ice-floe, for the infuriated animal would destroy the frail boat and certainly kill his assailant if the latter did not escape to a more stable element. Like other marine animals, when struck by a harpoon the walrus "sounds" or dives to the bottom. The kajaker takes this opportunity to reach the floe, gathering on his way the harpoon-

shaft and air-bag. Arrived on the floe, he plants his spear firmly in the ice, and, winding his line about it, proceeds to "play" the walrus exactly as a scientific fisherman plays a trout. The walrus must come up to breathe, and the untutored savage sees to it that it can only arise within striking distance from the ice; a savage thrust from a spear sends it down again, exhausted by another bleeding wound and a deprivation of air. Finally it dies, either from loss of blood or drowning, and is dragged out with infinite labor and all the gratification that a triumph of intellect over brute strength can afford, added to the satisfaction of the capture of a most valuable prize in a country where blubber, hide, ivory, meat, and bones are the only things worth living for.

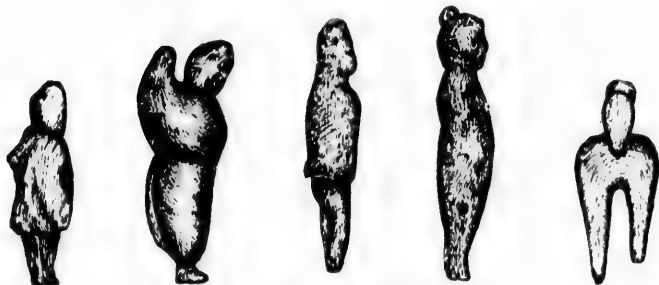
In endeavoring to obtain some of these spears and harpoons the natives were willing enough to let us have the ivory parts, but would not on any account part with the wooden shaft unless wood was given in return. They prized wood above any other material, and the value of that article was rendered evident by the fact that many of the spear-shafts were made up of a number of pieces tightly bound together to make a single stick of sufficient length.

Among other interesting articles obtained from these Cape York natives were a bone thimble, some children's toys made of ivory, and tokens or charms worn by the adults. The bone thimble resembled our metal ones, and had evidently been made for sewing with ordinary steel needles which had probably been obtained from some visiting whaler. The native needle is a thin flat

TOYS MADE OF IVORY, ACTUAL SIZE.



SLEDGES.



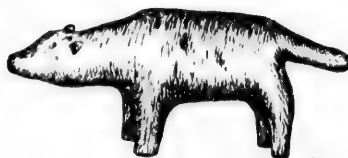
HUMAN FIGURES.



SEAL.



DOG.



BEAR.

piece of bone about four inches long and an eighth of an inch broad, with an eye in the end. In using these, of course, no thimble is necessary, as they are grasped in



"BUZZ SAW" OR "BULL ROARER."

the hand and thrust through the skin instead of being pushed with the finger.

The toys were small pieces of ivory or bone, an inch or two long, cut to resemble a seal, bear, dog, or even a person.

Another toy was composed of a flat piece of ivory about three inches long with two holes near the centre. A leather cord was passed through these holes and the ends grasped in each hand; on twisting the cord and then pulling its ends the piece of ivory was made to spin around rapidly, first one way and then another, just as do our boys with a round box-lid and string in the juvenile implement commonly known as a "buzz saw." A more complicated toy consisted of a piece of ivory about four inches long and an inch in diameter, with a



TOY FOR CUP-AND-BALL GAME.

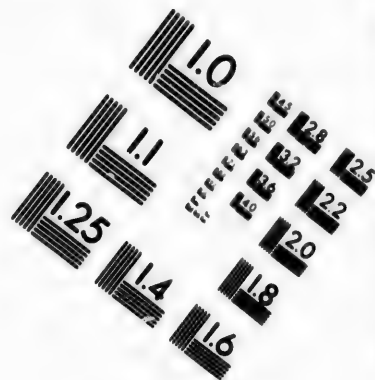
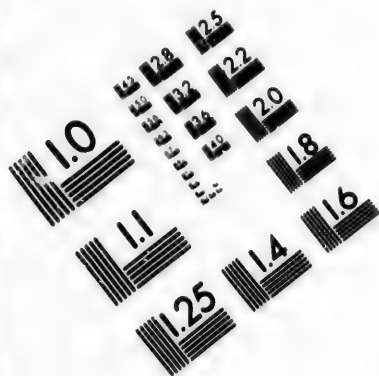
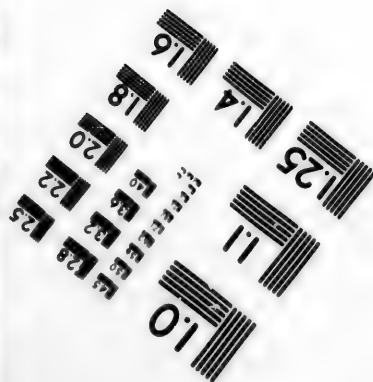
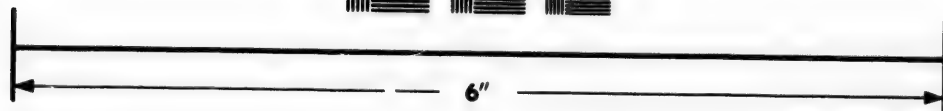
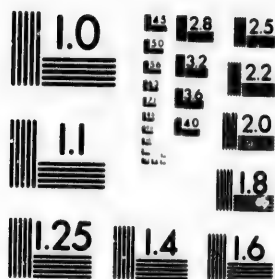


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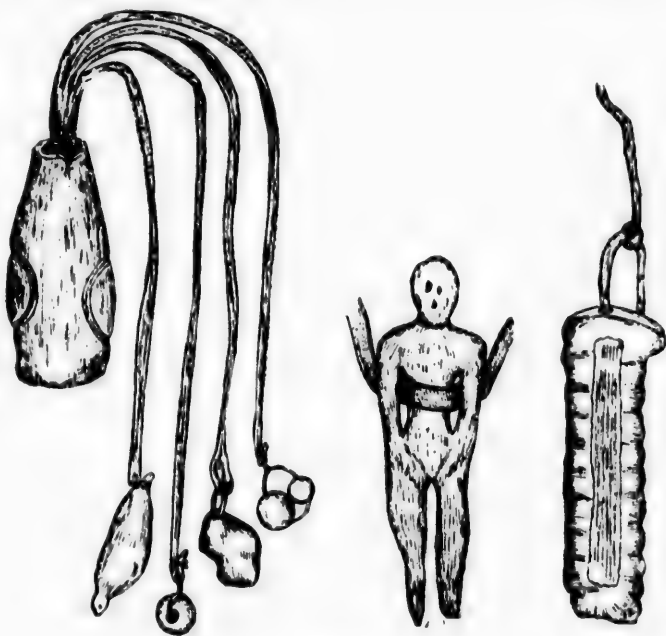
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cavity in its upper extremity. To this piece was attached, by a cord, a smaller one, pointed at one end and blunt at the other. Grasping the smaller piece in the hand, the larger one was thrown in the air and an attempt made to catch the point of the pin in the hole in the top. This, of course, is similar to our common cup-and-ball



CHARMS.

toy, the only difference being in having the pointed pin instead of a ball.

The children of the natives in Whale Sound, further north, also had toys similar to those obtained by us at

Cape York. Some of the adults wore various articles made of bone or ivory suspended by a cord around the neck. One of these was rudely shaped like a man; others consisted of the teeth of various animals; while one of the most elaborate was composed of a piece of ivory shaped as shown in the accompanying illustration, a small stone, and three large glass beads. These necklaces were not used simply as ornaments, but rather as charms, for their owners appeared to value them quite highly, and only parted with them reluctantly. The Cape York natives evidently see white men at times, as more evidences of iron and wood were found here than further north, and the possession of an old and rusty gun, stamped with the name of a whale-ship to which it had belonged, was found among their effects on shore. We gave them one of our guns and some ammunition in exchange for a kajak, a sledge, and some narwhal-horns. Needles, knives, and bits of iron were rapidly exchanged for ivory, spears, and lesser curios. Wood for making sledges and the framework of their skin boats seemed



NARWHAL-HORN.

even more desired by them than iron, and the small fragments of wood of which many of their implements were constructed showed how limited was their supply of this necessary article.

The last thing obtained from the natives in the way of trading was a young Eskimo dog. This was evidently prized very highly by them, and was only parted with

after much bartering. One of the natives walked out on the ice to the ship, holding the puppy in his arms, then, raising it up, indicated that it was something valuable, and wanted to know what we would give. I got one of the sailors to negotiate for it, and at last, after refusing several pieces of iron, he was offered a broken oar and the lid of a soap-box; this induced him to part with it, and he walked off in triumph with his wooden acquisitions, while I retained possession of the pup. On examining my prize I found him to be a dirty white, woolly little animal with a black patch on the side of his head; he was about ten or twelve inches long, chubby and fat, with a peaked nose, erect ears, and bright dark eyes. He had sharp little teeth, and, as nearly as we could estimate his age, was about eight or ten weeks old. He was stowed below with the sailors in the fore-castle, and there entertained and fed. His first diet was condensed milk and oatmeal. He soon became acquainted with his surroundings, and began excursions on his own account. Directing his attention to the steps leading from the fore-castle up to the deck, it was not long before he succeeded in making his way to the less restricted and lighter regions above.

Arriving on deck, a fresh field was open for his investigation. The first results were made known to us by seeing him come ambling back toward the after part of the ship, where several of us were sitting, his nose covered with blood and his woolly body full of feathers. A search was immediately instituted to discover what he had been at. The cause was soon found. In the bow of the ship

were seen the mangled remains of several highly-prized specimens of birds obtained by Professor Holt. On discovering his loss, the professor was somewhat chagrined, but bore his misfortune with philosophic fortitude. Hav-



"MICKEY."

ing once tasted blood, Mickey (for so the Eskimo called him, and we did likewise) continued to pursue his sanguinary way; indeed, his tastes enlarged to such an extent that he soon ate not only all the birds, ducks, and other fresh animal food that he could get hold of, but also potatoes, bread, biscuits, and, in fact, anything that he could swallow. Things that he could not worry down he contented himself with chewing. Under this list came such articles as boots, shoes, clothing, ropes, and everything else above decks that was not carefully guarded.

The actual limit of his appetite, like that of the Eskimo of whom we have already spoken, was never definitely ascertained. He would eat and eat until apparently double his ordinary size, and still appear to be as famished as ever. On the voyage home Mickey well earned his passage. In the words of the famous Artemus Ward, he was an "amoosin cuss." His playfulness and good-nature made him a favorite in both fore-castle and cabin. The ship's cat and he also became great friends, and played quite amicably together. He was a true puppy through and through, and though born and reared in a region of perpetual ice and snow, was just as playful and interesting as any in warmer lands. He increased rapidly in size, intelligence, and activity, and, as the pet of all, received an amount of attention that would certainly have been lacking had he remained in his Arctic home.

CHAPTER XIII.

ASCENDING THE IRON MOUNTAINS.—GREENLAND GLACIERS.—
AGAIN ON OUR WAY HOME.—THROUGH WAIGATE CHAN-
NEL.—A GLORIOUS SUNSET.—SEARCHING FOR COAL DE-
POSITS.

AS time was passing rapidly, we were anxious to start on our way south, and only awaited better weather. The last day of our stop at Cape York was misty and rainy. Nevertheless, Professor Heilprin determined to utilize it in ascending what are known as the Iron Mountains. On the map they are designated as mountains, though it is very doubtful whether they reach to an altitude of two thousand feet. They were discovered by Ross. He found the natives in the possession of rudely-fashioned iron implements, some of which are still preserved in the British Museum. From what information he could gather from the natives Ross was convinced that they themselves had manufactured the iron from masses found in the mountains back from the coast. It seems highly improbable that this primitive race should have discovered the art of iron-making, but, so far, it has been impossible to account for the iron on any other theory; for there is no known communication of the dwellers in the southern part of Greenland with those above Melville Bay, and the whalers had not, at the time of Ross's visit, commenced to make the perilous voyage

to Lancaster Sound. In view of the relic of the Hayes expedition already referred to, which had been preserved for over thirty years, it did not seem to us impossible that the iron implements which Captain Ross found in their possession were made from fragments of iron found on wreckage which had floated to their shores and been battered into shape by the aborigines. On account of this uncertainty we were anxious to discover whether any trace of iron manufacture existed, and the interest was redoubled when, in a skin tent, was found a heavy stone evidently containing iron. While it proved to be only a form of iron pyrites of very poor quality, it still seemed to indicate the presence of the metal, and the natives, when questioned as to its origin, undoubtedly pointed to the high land back from the coast. In spite of the cold, driving rain and sleet-storm, it was determined to ascend the mountains. The geologist and botanist with two Eskimos constituted the exploring party, the rest preferring the comfort of the ship's cabin rather than face the disagreeable weather outside.

Reaching the shore by crossing over the ice, the little party rapidly ascended a small knoll which marked a spur of the mountain, and began to climb over irregular rocks covered with a black and slippery lichen. The ascent soon became very difficult, great boulders blocking the way and compelling detours where the footing was most insecure. The storm soon changed to a mixture of snow and sleet which raged with all the fury of a gale and at intervals obscured the surroundings. Occasional glimpses of the ship, lying peacefully at anchor in

the little cove far below, served as a guide to their course, and as greater heights were reached, the tops of three small islands which laid about ten miles off the coast, south of Cape York, came into view. Contrary to the experience at McCormick Bay, the ascent became easier as the top was neared, not so much, however, from the lessening of the steep grade of the mountain as on account of the better footing. The black lichen disappeared, as did also the large glacier-worn boulders, and in their stead were hard granite rocks and finer pebbles. Gradually almost all vegetation disappeared, and soon a comparatively level plain of stones and small rocks was reached, easy progress then being made. The height indicated by the aneroid barometer was about seventeen hundred feet. No sign of iron or iron-bearing rock was observed. The stones were of every variety, from slate and sandstone to the hardest flint and granite, and had evidently been swept to their position by glacier action alone. Near the crest was found a small cairn. It seemed to have been built by human hands, but whether civilized or savage it was impossible to determine. In spite of the storm, which now had redoubled in violence, the two white men pressed on alone, for the Eskimos had refused to continue up to the crest, and had seemed to indicate by their cries and motions that it was dangerous to do so. They never venture into the interior, nor even visit the ice cap, as to them it is the abiding-place of evil spirits and demons, and inspires them with terror. The ice cap, which did not differ in any particular, as far as could be seen, from

that at McCormick Bay, was soon reached, and from it two glaciers were seen projecting into the sea.

The method of the formation of the Greenland glaciers was here admirably illustrated. As far as the eye could reach, to the north, the north-east, and north-west, lay an almost level sheet of ice, the product of centuries of winters. This covered all the natural inequalities of the ground, and served as the great source of supply for all the glaciers of the coast. It is only where spurs of land run to the sea, similar to the one that was ascended, that the underlying rock is visible, and even this is partially covered by the *débris* left by the retreating ice sheet. In reality, all Greenland may be said to be one great glacier, and the thousands of so-called glaciers, many of which are twenty or more miles across their face, are merely prolongations to the water's edge of this enormous mass of ice and snow.

It was useless to press onward, for the sleet obscured almost all natural features, and a retreat was made down what had evidently been an ancient glacier-bed, but was now covered with a heavy growth of moss and other vegetation. Here the botanist found a rich assortment of plants as a reward for his labors and the disagreeable weather that had been encountered. Large patches of red snow were crossed, and finally the beach was attained near the spur, on the opposite side of which the ship was anchored. Here was found an immense natural harbor, the cliffs rising perpendicularly to a great height, forming a natural basin with a contracted entrance. The spur of land was crossed with some difficulty, and the ship reached

after nearly four hours of constant but interesting toil. The object of the trip, the discovery of iron or iron-bearing rocks, was not accomplished, but a far more satisfactory knowledge of the natural configuration of the ground was obtained than would have been possible by observing it from the decks of the ship; a quantity of valuable material was also gathered.

Soon after the return of the mountain party the ship was prepared to start. The fog, which had been almost constant during our stay of a day and a half, at last lightened, and now and then, through occasional rifts in the clouds, open water could be seen to the southward. The few lingering natives were told to leave the vessel, and it was only as the ice-anchors were brought aboard that the last one reluctantly wended his way over the side. "Sar-pook, sar-pook" (good-by, good-by), they cried, as we slowly left their dreary home, mysterious people of a mysterious land.

In sharp contrast to the long struggle northward through Melville Bay was our southern trip over the same waters. On the northern journey we had encountered a vast and almost continuous sheet of ice, which seemed as permanent as the eternal hills. On the southern trip we found open water, with only an occasional iceberg to remind us of the great floes and ice masses we had met with a few weeks before. Constant fog and head winds, however, delayed the vessel, and our progress was particularly slow. We ran well out from land, but still in view of the higher headlands. The Horse's Head, a most peculiarly shaped point of land, and Red

Head, another conspicuous point, were the only ones definitely recognized until Devil's Thumb was reached. We had hoped to land and examine the latter curious formation, but no attempt was made on account of the storminess of the weather. Upernavik was passed at midnight; we did not stop, but continued on our way down the coast.

The next day found the atmosphere still thick, with a heavy sea running, and the ship was hove to all the afternoon in the neighborhood of Kangtok Island, which is west of Swartehuk Peninsula. This great and almost unknown body of land lies north of Disko Island. The impossibility of making progress against the heavy wind and sea tempted Captain Pike to enter a fiord on the Swartehuk in search of easy anchorage. The fiord is unmarked on the map except by dotted lines, and it was agreed that we would name it "Pike Fiord" in honor of our veteran commander. Its entrance is about two miles wide and protected from the sea by a small island which divides it into two passages; through either of these a ship can easily enter. Inside of this natural harbor is a wide, roughly irregular bay, protected on both sides by high mountains, to whose bleak, dark sides the peninsula owes its name. Here we found a good anchorage in twenty fathoms of water, the bottom being mud mixed with sand. The wind still blew fiercely, but as the ship was now safe, we determined to remain until it moderated. Some went ashore, and were well repaid for the rather rough passage across the bay. A river was found, emptying into the upper end of the fiord; here a landing

was effected without difficulty, and a general exploration began.

Flowers grew on every side in the greatest abundance and beauty. There were evident signs of game, and hunters and naturalists alike trudged off in search of specimens. The land rose rather abruptly, and within half a mile of the beach the river was found to be rushing through a narrow, rugged gorge, making a series of cascades of surpassing beauty as it leaped from rock to rock and fell into a pool beneath. Having seen at Godhavn some salmon-trout which had been caught by the natives, one of our companions essayed fly-fishing. The water was icy cold, and no sign of animal or vegetable life was to be seen in its depths; however, he whipped the stream industriously with various flies and even the native mosquito, which was there a large and lively pest, but without success.

Farther up the river again widened, and a large plain, lying between the frowning mountains, appeared. Here also a rich harvest of flowers was gathered, and every once in a while a beautiful ptarmigan would be started. Several of the latter were shot. They seemed very bold, and did not hesitate to scold the hunter vigorously for intruding on their domain, showing that they were seldom if ever disturbed by man. A diligent but unavailing search was made for their nests, and a few coveys of young birds were seen at a distance; they were fully fledged and much more timid than the older birds. Two of the hunters ascended the mountain, but found nothing of consequence to reward their toil. Mr. Kenealy and my-

self went for some distance along the shore, finding an abandoned hut and getting a distinct view of a glacier which, as usual, closed the end of the fiord. No signs of the recent visit of Eskimos were present. A deep gloom pervaded this unfrequented spot, which neither the birds nor the flowers relieved. The high cliffs were almost black in hue, either from the natural color of the rocks or the dark lichens, and a few glistening white icebergs served only to intensify the deserted appearance of the land.

Some time during the night the weather moderated, and, making our way out of Pike's Fiord by the southern entrance, our course was shaped for the Waigate Channel, which was reached on the morning of the 8th of August. We entered this channel, instead of sailing outside, in order to examine the shores for evidences of coal deposits which were said to exist there. This sheet of water separates Disko Island from the mainland, and is about seven miles wide. At one time it was undoubtedly a fiord, being cut through to Disko Bay at a later period by glacier action, thereby forming the largest known island in Greenland. To the north of the island, and extending from the mainland far into the sea, is a neck of land known as the Noursook Peninsula. Both sides of the Waigate Channel present the same geographical outline, here and there small fiords and indentations characterizing its shores. High mountains tower above the calm and placid waters, and the silence is only disturbed by falling fragments of glaciers. The outline of the mountains is much more broken and irregular

than is that of the mountains of more northern Greenland, and the peaks and pinnacles add greatly to its grandeur. The lofty mountain-tops, partly covered with snow, seen in the beautiful, clear weather and warm Arctic sunlight, more resembled Alpine scenery than is usual in the Frigid Zone. On all sides the many and beautiful icebergs, reflecting the rays of the sun, seemed to vie with the mountains in their gorgeous splendor.

All day long the *Kite* steamed slowly through this enchanting scenery, but it was only late at night that the most beautiful and interesting phenomenon of all presented itself to view. At this stage of our voyage the sun in its declination had perceptibly diminished the light of night, and though not yet below the horizon, still descended enough to drop behind the high mountains of the Noursook Peninsula, thereby making a most glorious sunset. The bright rays illumined the sky behind the mountains, forming a background of the most brilliant colorings and delicate, changing tones. The fading of the sunlight continued but a short time, and the sun, again rising higher, o'ertopped the mountains, and the dawn of the next morning was upon us. The gradual merging of the lovely sunset with the splendor of the coming morn completed this most charming of days in Greenland.

The fine weather, which continued the next day, added to our enjoyment. We had had almost a week of fog before reaching the Waigate, but there were few regrets now for the delay, as, had we experienced the same weather inside the channel as had fallen to our lot

on the open sea, the beauty of our surroundings would have been shut out from view. The scenery of the mountains, although not so imposing as that of the previous day, was heightened by the increased number and magnificence of the icebergs. As the ship would slowly wend its way through the narrow channels between them (so close together were they), we could see many miniature cascades falling over the sides. The warm sun, melting the snow on their tops, formed small lakes or reservoirs, the overflow of which, trickling down,



ICEBERG IN WAIGATE CHANNEL.

fell into the sea. The course of the *Kite* was now directed close along the eastern shores of Disko Island, in order that a good view could be had of its rocky sides. At times, when its geological formation indicated the possible presence of coal, one of the ship's boats would take the geologist ashore for a closer inspection; but no

carboniferous fossils were found. Soon the shore-line began to assume a more level aspect, and a long, shelving beach was discovered dead ahead. As the water was noticed to be shoaling rapidly the ship's head was turned out into the channel; but it was too late: she had hardly answered her helm before we grounded. The engines were at once put hard astern, but to no purpose: the *Kite* was fast aground. The lead-line showed less than three fathoms of water and a bottom of hard white sand. Here we were, beyond the reach of any assistance, with so little coal and ballast that even were it possible to remove it, the ship would only have been lightened a few inches. Our situation was indeed a critical one, and preparations were immediately made to work the vessel off. An anchor with a long hawser was taken in a whale-boat and dropped some distance astern; the other extremity being attached to the steam-winch on the vessel, an effort was made, by winding up the line, to pull the ship into deeper water, but after several futile attempts this was abandoned. We were truly fast, and our only hope of escape lay in the possibility that we had grounded at low water, and the rising tide would float us off. The mate was sent ashore to ascertain the condition of the tide, and he returned with the grateful information that it was a couple of feet below high-water mark; so we waited for its rising before making any further efforts. This was the first mishap that had occurred to us on our return trip, and some of the more superstitious sailors attributed it to the presence of the Eskimo skulls which had been obtained further north.

While waiting, we observed, from the deck of the ship, some smoke arising from a hut situated on a point of land opposite to where we had grounded. In a few minutes several natives were seen coming down to the beach, having evidently made the smoke to attract our attention and let us know of their presence; launching their kajaks and getting in, they paddled rapidly toward us, and were soon aboard. We found them to be natives from the settlement of Godhavn who were there on a hunting expedition. By signs they gave us to understand that the tide would soon rise and float the ship; this aided in relieving our anxiety somewhat on that score. They greedily devoured some food that was given them, and afterward, on being shown a piece of coal, indicated that they knew what it was and where some could be found. As we had considerable time yet to wait for the rising tide, a few of us went ashore, accompanied by one of the natives who had signified his willingness to act as guide and show us where the deposit was located. Professor Heilprin and the native started out to search for it, while the rest of us stayed along the shore and awaited their return. The land at this point rose gradually from the water's edge for a distance of about three miles, the beach being composed of sand and gravel. As one advanced inland the surface became rougher, being covered with rocks and boulders. We found some ptarmigan which were quite tame and ran slowly away as they were approached. A number of foxes also were seen, but they were more shy, and disappeared in the crevices and holes in the rocks as we drew

near. In two or three hours the professor returned, stating that his investigation had not been very satisfactory. He had travelled two or three miles inland and found some coal, but it was of so poor a character, in such small amounts, and so inaccessible as to render the deposit of little value. By this time we saw that the crew had succeeded in getting the vessel off, and she was steaming to deeper waters; so we got aboard, and the *Kite* once more started on her voyage.

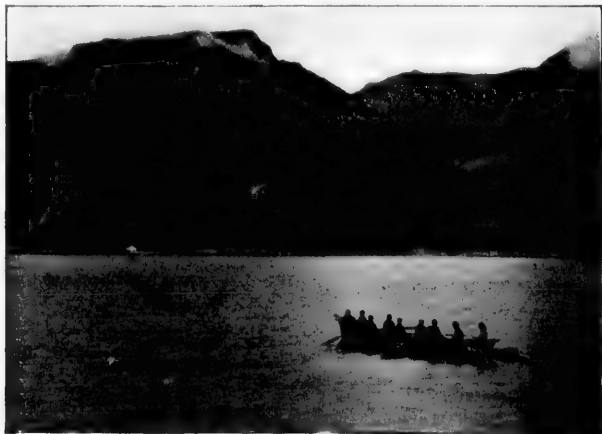
CHAPTER XIV.

AT GODHAVN ONCE MORE.—METEORITES.—THE LAND OF DESOLATION.—TAKING ON BALLAST.—ON THE OPEN SEA.—NIGHT BEGINS.—OFF THE COAST OF LABRADOR.—APPROACHING ST. JOHN'S.—OUR RECEPTION.—A REVIEW OF THE TRIP.

STEAMING around the south-eastern extremity of Disko Island, we entered the fiord on which Godhavn is situated. As we were nearing the settlement Inspector Andersen passed us in his large boat, rowed by eight or ten natives. He was leaving Godhavn to make his annual visit to the adjacent settlements, which were under his supervision. He waved us a friendly farewell, but did not stop, and in the early morning of August 10th the *Kite* once more dropped anchor in the harbor of Godhavn. Mr. Carstens soon came out to the ship and heartily welcomed us. He told us that the long south-west storm which we had encountered, followed by heavy winds, had also been experienced at Godhavn, and that he and his associates had both feared that it would be too much for the *Kite*, and that they would never see us again.

The natives too came aboard, but, after our experiences with the aboriginal race further north, they scarcely interested us, and the few trifles they had to sell brought them but little return.

The *Kite* was forced to take on ballast at this port, for the consumption of coal and the removal of the effects of the Peary party had so lightened her as to render her almost unmanageable in a head wind and sea. A number of the natives were engaged to gather ballast for us, and it was evident, from the leisurely manner in which they set about it, that we would have to remain at least two days in port. This news was, however, welcome to all, for after our long isolation even Godhavn looked like home, and we were content to enjoy the pleasant companionship of the officials. The naturalists were soon on their collecting tours, some to the Red River, and some to the island of Godhavn. Professor Heilprin, accompanied by Mr. Ashhurst, hired a large native boat or



UMIAK OR WOMAN'S BOAT.

umiak, with its crew of seven Eskimos, and started for Uvifak, a desolate piece of land some twenty-four miles

from Godhavn, where was said to be the remains of a meteorite. This so-called meteorite consists of an aggregation of numerous masses of nearly pure iron which are found imbedded in the basaltic rock. The largest fragment was removed several years ago by a special expedition sent out for the purpose by the Swedish government. The whole had been estimated to have weighed 46,200 pounds. Several smaller fragments were known to exist, and it was thought highly desirable to recover some of these if it was possible to do so.

The journey was long and tedious, for the rudely-constructed umiak was slow, and, in spite of the hard and steady work of the natives, it was eight hours before the place was reached. Here was found a large meteoric fragment (now in the Museum of the Academy of Natural Sciences), and a little searching discovered several smaller stones. They were all irregularly-rounded masses having marks of fusion on their exterior, and were composed almost entirely of native iron. These facts seemed to point directly to a celestial origin. Nevertheless, the geologist found reason to think that they were not true meteorites, but were terrestrial formations which had been thrown or carried to the location in which they were found by volcanic or other phenomena. In any case, the discovery was a most important one, and the specimens were regarded as being among the most interesting and valuable of all gathered in the course of the voyage.

The evening shades were becoming more evident now, and we greeted with delight the first star which



A BIT OF GREENLAND SCENERY. DISKO ISLAND.

we had seen for more than a month; it was shining over the high hills of Disko. The new moon also was faintly visible in the clear evening sky. We were glad to light the lamps again in the dim little cabin, and here we gathered about Mr. Carstens while he imparted to us his knowledge of Greenland history and customs. His fund of information was very extensive, and he was able to inform us on many points not referred to in the books. Much of what was related has already been told in describing the social life and folk-lore of Greenland. He added, however, many points in relation to the history of Greenland which may briefly be recounted here.

Greenland, "The Land of Desolation," as it was well called by Hayes, was discovered by Eric the Red. Eric was a turbulent nobleman who, banished from Denmark, and later from Iceland, sailed westward to the coast of Greenland, to which he gave its somewhat deceptive title. It is related in the old chronicles that he gave it that name with the direct intention to deceive and defraud, hoping that "a fair name" might tempt colonists to settle. The voyagers all regretted that the exigencies of the trip prevented our stopping at *Friedrickshaab*, where the remains of old Eric's buildings are still standing, after a lapse of over nine hundred years; for the voyage of Eric was made about the year 986. The story of the settlement he made has often been told. The poor people whom he persuaded to settle in his "fair land" lived for a time peacefully and with some comfort; but there were many drawbacks to their welfare. They had to depend almost entirely for supplies of certain ma-

terials, notably wood and iron, on vessels which, for several years, came from Iceland. On one occasion, one or two years having passed without supplies being sent, the relief vessel found only their bones. They were the first victims of the Eskimos, and, as far as known, the last. What had happened was unknown, but it is supposed that the Skrallers or Howlers, as the natives were called, from the horrid noise they made at night, had slaughtered them after their numbers had been reduced by famine. The land, after this, lay idle and unoccupied by white inhabitants for hundreds of years, but at last was settled again, originally as a penal colony, and later, since the year 1774, as the personal property of the Crown of Denmark. This it still is, and "trespassers are forbidden." We learned this after we had committed the crime of landing on the northern trip, but as the offence was only a venial one, no punishment was inflicted on us. Denmark claims jurisdiction over Greenland up to the 73d parallel of north latitude. Above that it is no man's land, and, indeed, any nation might easily gain Denmark's consent to an abdication of its rights to southern Greenland, for we were informed, on highly trustworthy authority, that it has ceased to be a source of income, and were it not for the fostering care which Denmark has exercised over the natives of Greenland, there is little doubt but they would soon become extinct. The Eskimo population last year numbered ten thousand and thirty, a decrease of seven from the year before; and a steady diminution continues in spite of the systematic care and support which the government so generously extends to them. It is prob-

able that there are but few Eskimos north of Melville Bay. Captain Ross many years ago calculated their number at but two hundred, and the estimates of Arctic voyagers since his time have not exceeded it. We saw not over one hundred at both Whale Sound and Cape York, and but one other native settlement is known. This is a small village called Etah, situated on Hartstene Bay, about one degree further north than Whale Sound. This place we did not visit. It was here that Hayes established his winter quarters in 1860. It has but few inhabitants, and even if they were added to those that we saw, the total number would still fall far short of the estimate of Captain Ross. Greenland is under the control of a government board in Denmark known as the *Koniglige Gronlandske Handle*. It is divided into two inspectorates, north and south, divided by the parallel of $67^{\circ} 40'$ north latitude. The inspector of the former resides in Godhavn, and the latter in Godhaab. They are responsible to the home government. The inspectorates are divided into a number of districts, each having its own governor and assistant governor, who are responsible to the inspector in whose jurisdiction the district is situated. In the Northern Greenland districts, besides the inspector, governor, and assistant governor, there are no white people except a doctor who lives at Jakobshavn. In Southern Greenland there are two more physicians, one living at Godthaale, and the other at Julianehaab. After five years of duty they are allowed to enter the royal service in Denmark as district physicians.

All this and much more Mr. Carstens narrated to us

as we chatted together in the little cabin of the *Kite*. In our turn, we told him of the aboriginal inhabitants at Cape York, whom he had never seen. We asked him whether there were any relics left near Disko of the primeval Eskimos. He told us of an old graveyard situated across the bay from Godhavn, which was long abandoned, but where he said aboriginal tombs, exactly as we had described, still existed. The idea of discovering other relics immediately inspired me, and, launching a boat, with only Mr. Kenealy as my companion, I rowed across the narrow bay in the midnight twilight to the locality which Mr. Carstens had indicated. With some little difficulty the place was at last found, and tomb after tomb opened, with the result of unearthing quite a collection of skulls. No votive offerings such as we had found at Whale Sound were discovered, though earnestly sought for. This was accounted for, perhaps, by the fact that the tombs were ancient and their contents might have decayed away. Gathering together a number of skulls, we returned to the ship in the early morning, just before the return of Professor Heilprin and Mr. Ashhurst from their long and tiresome journey of some sixteen hours' duration.

All hands were weary when, at about 3 A. M., we went to bed, and it was not until late the next day that the customary activity prevailed among us. The work of loading ballast for the ship still continued, but in the most leisurely fashion. A boat being sent to the beach, the natives would gather blocks of stone, carrying them one by one until a load was procured. These in turn

were passed up the ship's side and dropped carefully into the hold.

It was our last day at Godhavn, and, as it turned out, also our last in Greenland, and all were anxious to make the most of it. I saw no opportunity to add to the collection already made, so a consideration of a more practical nature than that which inspired the others moved me. I had observed that the breeches made for me at Cape York by the Eskimo women were not pliable, like those worn by my comrades, which had been made at Godhavn. They were stiff and ungainly, and, when not in use, like stovepipes in rigidity. A conversation with one of the Eskimos who spoke a little broken English, and the translation of whose unpronounceable name was Raven, revealed to me the cause: they had not been chewed. It appears that it is necessary to carefully chew the seal-skin to render it sufficiently pliable. This was unwelcome news, for I knew of no one who would care to chew the garments, filled as they were with rancid oil. But Mr. Raven, in consideration of a certain amount of plug tobacco, kindly offered to manage all that, and, escorting me to the house, introduced Mrs. Raven to me, with the brief direction to her (at least so I suppose) to chew the garments thoroughly. I remained to witness the operation, which she began with that cheerful alacrity that characterizes the Eskimo woman when directed by her lord, but the sight was not pleasant, and I left the garments to her tender care. I must confess that she did the work in the most skilful manner, and also added a couple of buttons, so that I was no longer com-

pelled to tie them together with thongs. Mr. Raven brought them back in the afternoon in a most satisfactory condition, and I paid him the tobacco agreed upon. I suggested that his wife should have something to compensate her, instead of paying him, but he did not seem to understand me, and the subject was dropped.

At 1 A. M. on August 12th steam was made, and we left Godhavn. All were on deck, and we took a last look at the place which will always remain the most pleasant in our memories of Greenland. A solitary star shone brightly over the village. By its brilliancy we knew it to be the planet Jupiter, as the night was not yet dark enough to show stars of lesser magnitude. A few minutes sufficed to take us out of the harbor and place us once more on the open sea. The weather continued good all day, and we made an excellent run. Early the next day a strong wind sprang up, which soon developed into a gale. The sea ran mountains high, and our ship was tossed about so violently as to be almost unmanageable. It sent all but those who were actually employed in working the vessel to their berths for safety. It was almost impossible to move around without great danger, and we all kept pretty quiet as long as the blow lasted. After some hours the wind began to subside, leaving a heavy swell which pitched the vessel about as if it were a chip. The weather was hazy, with rain at intervals, which, much to the relief of all, gradually calmed the sea. The chief engineer, Mr. Jardine, reported that only enough coal remained to take us direct to St. John's, so we were forced to forego the pleasure of visiting several

points in South Greenland, as had been our desire. The weather now became clear and bright, with a fair wind. Early in the morning a brig was sighted sailing south, about ten miles to the westward of us. All went on deck to get a look at her. It was remarkable that what in other waters would be such a trifling event, in these untravelled seas commanded all our attention. For nearly three months, with the exception of those at Godhavn and Upernavik, we had not seen a ship nor any sign of civilized man. The stranger was a trim little craft, not far enough south to belong to the line which carries creolite from Ivigtuk to Philadelphia, and too far north to be in the Danish trade with the North Greenland settlements. All these latter had left Godhavn, on their voyage to Denmark, long before our own departure. We did not expect to meet any vessels, because it was so late in the season that sailing ships would hardly venture so far north for fear of being caught in the ice. We had ourselves taken the last mail from the North Greenland settlements, the governor bringing it off to us the night we left Godhavn, and stating that it was the only opportunity he would have of sending any until next season. The brig was too far off our course to speak her, and as it would have taken too much of our now valuable coal to have sailed within communicating distance, she remained as mysterious as when first seen, and the cause of the only excitement of the day.

On Sunday, August 16th, the wind was dead ahead, and stormy enough to cause considerable sea, which made the distance run much less than on the previous day.

Darkness at this time began about 9 P. M., and the lights in our cabin and about the ship were now used, after many weeks of continuous daylight. We had had a sight of the moon for the past three nights, and the numerous stars visible in the heavens gave the sky more the appearance of that of the Temperate Zone. The North Star was very bright, and seemed almost directly overhead. The strong head wind and high seas continued until morning, and it was necessary to put the ship three points off her course to ease her up. Twenty-four hours later the sun was again shining, and made everything look brighter. The sea had gone down, and early in the evening the moon, which was now full, was seen in all its beauty. At 10 P. M. we were treated to the magnificent spectacle of the aurora borealis as seen in these Northern waters. No conception of its brilliancy can be had at home, and it will be remembered as one of the many strange sights this interesting voyage afforded us. The next day the weather was again fine, and the sea as still and calm as the proverbial mill-pond. A light favorable wind came up toward night, when all sails were set and our ship sped along at a more rapid pace than for some time. About 8 P. M. a large steamer in the east was seen to be bearing down upon us. As it evidently wished to speak us, the *Kite* was stopped and its approach awaited. It proved to be the *Carthage*, of Scotland, and we found that they wished to know the course to Indian Harbor, Labrador. This information was given them by Captain Pike, and after exchanging salutes we renewed our respective courses.

On August 20th we reached Labrador and skirted the coast. The land was high, rocky, and in places appeared green from the presence of vegetation. It looked more hospitable than the more barren shores of Greenland. Hundreds of fishing-boats were now seen everywhere, and signs of civilized man greeted us once more. Large icebergs were still floating here and there, the only reminder of our late trials and dangers. The steamship *Panther*, of St. John's, was spoken. This vessel was interesting as being the one that had taken Dr. Hayes' expedition as far as Melville Bay, years ago. It had been rebuilt since then, and was quite a trim little craft. On the night of August 20th we were abeam of Belle Isle. On the following day head winds were encountered, with rain. The ship, being so lightened, was now quite hard to drive through the heavy seas, and the pitching and tossing commenced once more.

On August 22d the sun, shining brightly, showed the green and picturesque shores of Newfoundland. The transformation from the icy North to a land again inhabited by our own kind was indeed striking, and heartily appreciated by all. The sea was quiet, and we soon arrived in sight of the harbor of St. John's, and were safe once more.

It was on a beautiful Sunday morning that the voyage of the *Kite* came to an end. All hands were busy making themselves presentable for civilized society, and the transformations that were accomplished by some of the members were truly astonishing. About 9 o'clock we came in sight of the entrance to the harbor of St. John's.

Our arrival was signalled at once from the top of the great cliff which marks one side of the entrance. Its crest was surmounted by a fort and signal station, and from it signal flags were flown in succession, which, being interpreted, meant "A steamer coming in;" "Bowring Brothers;" "the *Kite*;" we were reported. These signals are plainly visible at St. John's, and the crew were overjoyed that their families would soon know of their safe return from the Arctic regions.

It took nearly an hour to reach dock, for the entrance to St. John's is narrow and tortuous. Through lofty cliffs the passage wends its way to a splendid harbor, second to none in the world, and it is not until the last bend is passed that one sees any signs of a large city or even civilization. Finally, buildings appeared, and in a moment the whole city, with its blocks of houses ranged in terraces of streets, was in full view. The narrow channel widened to a great bay, on the shores of which laid the town. To the right was Signal Hill, from which the notice of our arrival had been sent; to the left rose another great promontory, crowned by the arsenal and fort with which England protects this important port; and, immediately in front, the city of St. John's, with the high cathedral towers dominating the town.

Our signal had evidently been seen, for the townspeople flocked to the wharf, and, before the ship could be made fast, overwhelmed us with inquiries; but, being tired of sea-life, we were anxious only for rest and a comfortable hotel. This was found without difficulty on the main business street of the city, after sending away a

few telegrams to assure the folks at home of our safe arrival.

We were compelled to remain at St. John's for five days, as no steamer left until the following Friday, when the *Nova Scotian*, of the Allan Line, departed for Baltimore. The time was spent very pleasantly, however, for we found numerous friends among the honest Newfoundlanders. Mr. Molloy, the American consul at the port, entertained us with the greatest cordiality. Mrs. Molloy was equally hospitable, and insisted on the whole party being invited to their house. Not less courteous was the Rev. Mr. Harvey, the historian of Newfoundland, who was kind enough to personally introduce us to the governor, Sir Terance N. O'Brien, at the Government House. His Excellency received us pleasantly, and invited the whole party to the reception which it was proposed to give to Sir Ambrose Shea, a former governor of Newfoundland, who was expected to arrive at St. John's on the *Nova Scotian*, en route to his new post at the Bermudas.

Besides these acts of distinguished courtesy, we were the recipients of marked attention from other citizens of St. John's. Several of us visited the British war-ship *Emerald*, which lay in the harbor, and were most hospitably received by the captain, Sir. Baldwin W. Walker, Bart., and the other officers of the ship.

On Friday morning we left St. John's on the *Nova Scotian*, and after an uneventful voyage—save for a short stop at Halifax, N. S.—arrived at Baltimore, whence we proceeded to Philadelphia, where we arrived on Septem-

ber 8th, thus completing our voyage in a little more than three months.

To review the trip: the object which moved Lieutenant Peary was a most laudable one, and if successful will add greatly to our knowledge of a most obscure quarter of the world; on the part of the returning members of the expedition, they brought home, besides much valuable information, many specimens of the flora and fauna of Greenland. Such collections, whether anthropological, zoological, botanical, or geological, are always of benefit to the world's fund of knowledge.

This is the main aim of all explorations, and the members of the expedition have no reason to be ashamed of their contribution. There were more than seven tons of material brought back, a large proportion of which is now in the Academy of Natural Sciences, ready for the use of future students of the various features of Arctic life. The skulls and other anthropological material which we were fortunate enough to obtain have proved a most useful addition to the fine collection now in the Academy's museum. Not less valuable were the additions made in ornithology, in invertebrate zoology, in entomology, and in botany. Every separate object, whether an Eskimo child's toy or a meteoric mass, has its value in the eyes of the true scientist, who knows where each belongs in the great economy of nature.

It was not until the voyage was nearly over that we fully comprehended what we had done and what we had aimed to do. The realization of the dangers so recently passed seemed to increase as we neared home and had

more time for reflection. The tales of Kane and others now came back to memory with such vividness and realism that the imagination needed not to be called upon for scenes and places; indeed, so strange and different had been the Arctic land and its people that one might have asked whether it was still our own world. The inconceivable immensity of the glaciers, the mere fragments of which make gigantic and lofty icebergs; the midnight sun, shining on the illimitable ice cap; the strange and curious forms of animal and vegetable life; the intense solitude, unbroken save by the heavy rumbling and thundering of collapsing bergs, which at times, though many miles away, would make almost tidal-waves by their sudden displacement of the water, and very perceptibly cause our ship to roll and toss on the troubled sea,—again and again passed in review before us as we sat lazily dreaming on the sunlit decks on the passage homeward. The heavy gale we encountered on leaving Whale Sound, where we were but a mile or two from a lee shore, with crashing bergs everywhere around us and the weather so thick that not a ship's length could be seen from our deck; the grounding of our ship in Waigate Channel, and our numerous escapes from being wrecked by the ice,—all caused us to realize how close we had been to having met the fate of so many others who had ventured to the frozen North.

FINIS.